



INDEX SECTION 4 - HARDWARE

GALVANIZED ANCHOR RODS-----	4-1
EXPANDING ANCHORS -----	4-1A
ANCHOR & CHAIN SHACKLES-----	4-2
GUY ATTACHMENTS FLAT HEAD TYPE-----	4-3
GUY ATTACHMENTS-----	4-4
COMBINATION ATTACHMENTS & POLE EYE PLATES -----	4-5
ADJUSTABLE POLE BANDS-----	4-6
CARRIAGE BOLTS-----	4-7
DOUBLE ARMING BOLTS -----	4-8A
DOUBLE ARMING BOLTS-----	4-8B
GALVANIZED MACHINE BOLTS -----	4-9
GALVANIZED OVAL EYE BOLTS-----	4-10
UPSET SPOOL BOLTS -----	4-11
THIMBLE EYE BOLTS-----	4-12
ANGLE DOUBLE SPAN BRACE-----	4-13
FLAT CROSSARM BRACE-----	4-14
CROSSARM MOUNTING BRACKETS-----	4-15
POLE TOP BRACKETS-----	4-16
POLE TOP BRACKETS-----	4-16A
INSULATOR BRACKETS SIDE POST TYPE -----	4-17
INSULATOR BRACKETS SIDE POST TYPE-----	4-17A
INSULATOR BRACKETS SIDE POST TYPE-----	4-17B
INSULATOR BRACKETS SIDE POST TYPE-----	4-17C
STANDOFF BRACKETS -----	4-18
SINGLE OR DOUBLE CONDUIT SUPPORT BRACKET -----	4-19
CROSSOVER CLAMPS-----	4-20
CABLE CLAMPS GUY & SUSPENSION -----	4-21
CLEVIS—DEADENDING & INSULATED STYLE-----	4-22



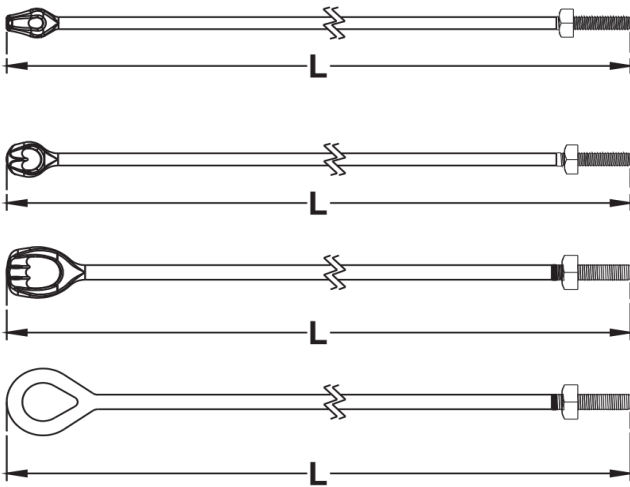
CLEVIS—SECONDARY & SWINGING STYLE -----	4-23
BOLT & THIMBLE EYELETS -----	4-24
OVAL & THIMBLE EYE NUTS -----	4-25
TWINE & TRIPLE EYE NUTS -----	4-25A
CLEVIS EYENUTS -----	4-26
DUCTILE IRON GUY CLIPS-----	4-27
GROUNDING CLAMPS-----	4-28
BRONZE GROUND ROD CLAMPS -----	4-29
GALVANIZED GROUND RODS -----	4-30
COPPER GROUND RODS -----	4-31
DRIVE HOOKS -----	4-32
GUY HOOKS & STRAIN PLATES -----	4-33
LOW VOLTAGE INSULATOR PINS-----	4-34
LOW VOLTAGE INSULATOR NYLON PINS -----	4-34A
HIGH VOLTAGE INSULATOR PINS-----	4-35
HIGH VOLTAGE INSULATOR NYLON PINS -----	4-35A
POLE TOP PINS -----	4-36
OFFSET POLE TOP PINS-----	4-36A
LAG SCREWS -----	4-37
RISER SHIELD LAG SCREWS -----	4-37A
STAPLES-----	4-38
POLE STEPS-----	4-39
LINE POST INSULATOR STUDS -----	4-40
GALVANIZED ROUND WASHERS -----	4-41
LOCK WASHERS-----	4-42
GALVANIZED SQUARE WASHERS -----	4-43
M F LOCKNUTS & REGULAR SQUARE NUTS-----	4-44
SPRING WASHERS-----	4-45
MAST ARMS, WOOD POLE MOUNTING-----	4-46



CLAMPS-----	4-47
FITTINGS, GUY -----	4-48
GUY HOOKS-----	4-49
WIRE HOLDERS-----	4-50
WIRE HOLDERS-----	4-50A
PINS CROSSARM CLAMP TYPE -----	4-51
ARMS, STEEL -----	4-52
ARMS, STEEL -----	4-52A
ARMS, STEEL -----	4-52B
ARMS, STEEL -----	4-52C
ARMS, STEEL -----	4-52D
CABLE RACKS -----	4-53
PINS ANGLE CROSSARM-----	4-54
SPACER, PIPE -----	4-55
PLATES, LIFT AND LOAD -----	4-56
TRANSFORMER MOUNTING -----	4-57
CABLE SUPPORT INSULATORS-----	4-58
GRID GAINS -----	4-59



GALVANIZED ANCHOR RODS

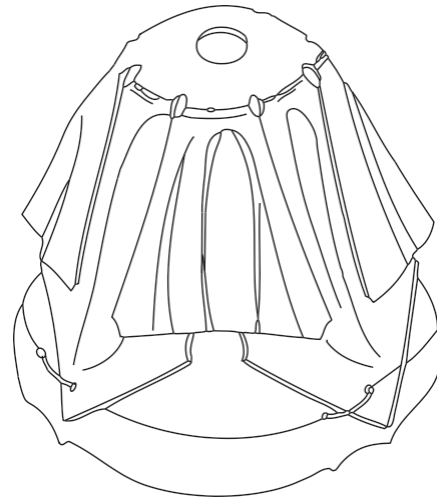


ROD DIMENSIONS DIA.	L	MINIMUM ULTIMATE STRENGTH	CATALOG NUMBER THIMBLEYE	APPROX. WEIGHT PER 100	CATALOG NUMBER TWINEYE	APPROX. WEIGHT PER 100	CATALOG NUMBER TRIPLEYE	APPROX. WEIGHT PER 100
1/2"	5'	10,000 LBS.	U7405	338 LBS.	—	—	—	—
1/2"	6'	10,000 LBS.	U7406	418 LBS.	—	—	—	—
1/2"	7'	10,000 LBS.	U7407	476 LBS.	—	—	—	—
1/2"	8'	10,000 LBS.	U7408	535 LBS.	—	—	—	—
5/8"	3'	16,000 LBS.	U7413	342 LBS.	—	—	—	—
5/8"	4'	16,000 LBS.	U7414	426 LBS.	—	—	—	—
5/8"	5'	16,000 LBS.	U7415	494 LBS.	U7515	452 LBS.	—	—
5/8"	6'	16,000 LBS.	U7416	578 LBS.	U7516	545 LBS.	—	—
5/8"	7'	16,000 LBS.	U7417	663 LBS.	U7517	615 LBS.	—	—
5/8"	8'	16,000 LBS.	U7418	748 LBS.	U7518	697 LBS.	—	—
5/8"	9'	16,000 LBS.	U7419	833 LBS.	U7519	778 LBS.	—	—
3/4"	6'	23,000 LBS.	U7426	791 LBS.	U7526	811 LBS.	U7326	1108 LBS.
3/4"	7'	23,000 LBS.	U7427	915 LBS.	U7527	919 LBS.	U7327	1110 LBS.
3/4"	8'	23,000 LBS.	U7428	1036 LBS.	U7528	1043 LBS.	U7328	1245 LBS.
3/4"	9'	23,000 LBS.	U7429	1160 LBS.	U7529	1168 LBS.	U7329	1425 LBS.
3/4"	10'	23,000 LBS.	U7430	1283 LBS.	U7530	1301 LBS.	U7330	1600 LBS.
1"	8'	36,000 LBS.	U7438	2210 LBS.	U7538	2280 LBS.	U7338	2288 LBS.
1"	10'	36,000 LBS.	U7440	2740 LBS.	U7540	2835 LBS.	U7340	2824 LBS.
1 1/4"	10'	58,000 LBS.	—	—	—	—	U7350	4380 LBS.

THE ABOVE ANCHOR RODS COME COMPLETE WITH A HEAVY SQUARE NUT AND A MINIMUM OF 3 1/2" THREAD. OVALEYE RODS ARE ALSO AVAILABLE BY ADDING THE PREFIX —OII TO THE #SC7400 SERIES. (#OSC7405) SOME SIZES MAY REQUIRE A MINIMUM ORDER AMOUNT. THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



EXPANDING ANCHORS



CAT.NO.	HOLE SIZE	AREA SQ.IN	ROD SIZE	STANDARD PACKING	APPROX WEIGHT PER100
U8115	8"	115"	5/8"-3/4"	6	900LBS
U8135	8"	135"	5/8"-3/4"	6	900LBS
U8135-1	8"	135"	1"	6	900LBS
U8200-1	10"	200"	1"	4	1925LBS
U8200-3/4	10"	200"	3/4"	4	1925LBS
U0283	12"	300"	1 1/4"	2	3300LBS
U0283-1	12"	300"	1"	2	3300LBS

THE ABOVE EXPANDING ANCHORS ARE FURNISHED WITH A HIGH GRADE ASPHALT COATING.
TO OBTAIN A HOT DIPPED GALVANIZED FINISH PLEASE ADD THE LETTER —"G" TO THE PART NUMBER.
EXAMPLE:#U8135-G

ANCHOR & CHAIN SHACKLES

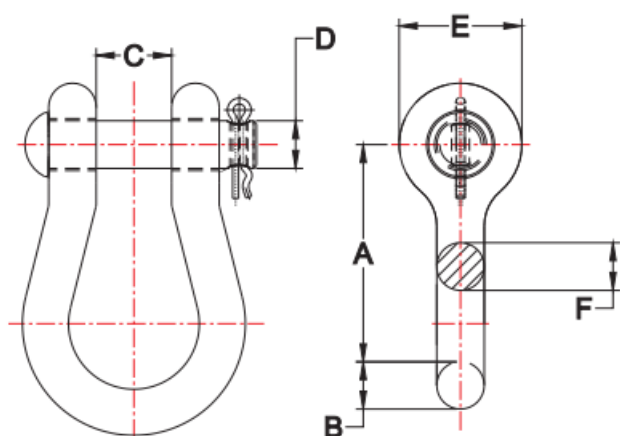


FIG. 1

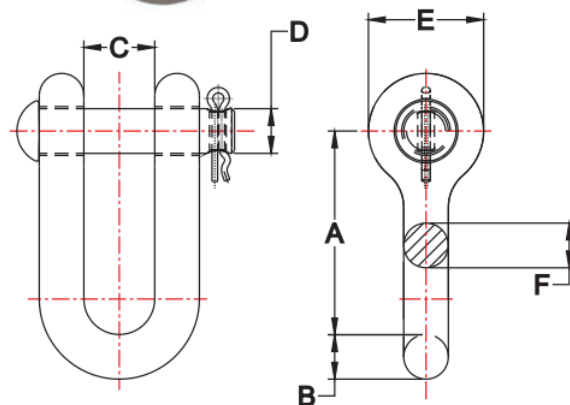


FIG. 2

CATALOG NUMBER	FIG. NO.	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"	DIM. "F"	ULTIMATE STRENGTH	WEIGHT PER 100
U2742	1	2 1/13"	1/2"	7/8"	5/8"	1 5/16"	1/2"	25000 LBS.	79 LBS.
UAS25	1	2 3/16"	5/8"	7/8"	5/8"	1 3/8"	11/16"	30000 LBS.	98 LBS.
UCS25L	2	2 7/8"	5/8"	1"	5/8"	1 5/8"	5/8"	25000 LBS.	129 LBS.
UCS35	2	2 3/8"	5/8"	1 1/16"	3/4"	1 1/2"	5/8"	35000 LBS.	132 LBS.

THE ABOVE SHACKLES ARE OFFERED IN ANCHOR STYLE AND CHAIN STYLE.

THE MATERIAL IS AS FOLLOWS :

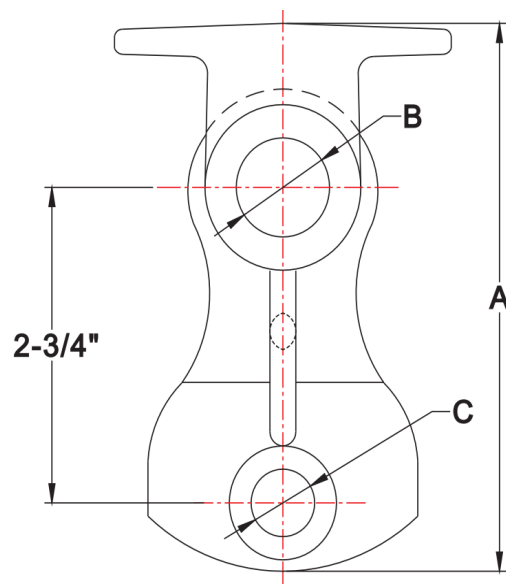
BODY AND PIN : STEEL HOT DIPPED GALVANIZED TO ASTM A153

COTTER KEY : STAINLESS STEEL

PLEASE REFER TO OUR TOWER HARDWARE SECTION FOR OTHER SIZES OF SHACKLES.



GUY ATTACHMENT FLAT HEAD TYPE



CATALOG NUMBER	DIMENSION A	DIAMETER B	DIAMETER C	APPROX. WEIGHT PER 100
FHGA – 5X	4 3/4"	13/16"	SPUR	90 LBS.
FHGA – 5	4 3/4"	13/16"	9/16"	73 LBS.

THE ABOVE FLAT HEAD TYPE GUY ATTACHMENTS ARE PRIMARILY USED WITH WIRE VISE AND AUTOMATIC DEADENDS. THEY ALSO OFFER A SAFE METHOD FOR INSTALLATION OF GUY GRIPS. A SEALING TYPE PLATE LOCATED AT THE TOP MOUNTING HOLE HELPS KEEP WATER FROM DETERIORATING THE WOOD POLE. THE USE OF A RIBBED TYPE CONSTRUCTION LESSENS THE WEIGHT OF THE ATTACHMENT WITHOUT ANY LOSS IN STRENGTH.

THE MATERIAL IS DUCTILE IRON HOT DIPPED GALVANIZED TO ASTM A153.



GUY ATTACHMENTS

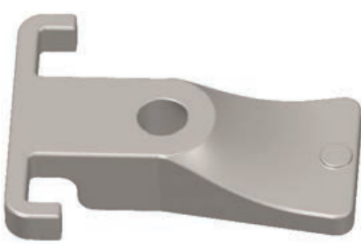


FIG. 1



FIG. 2

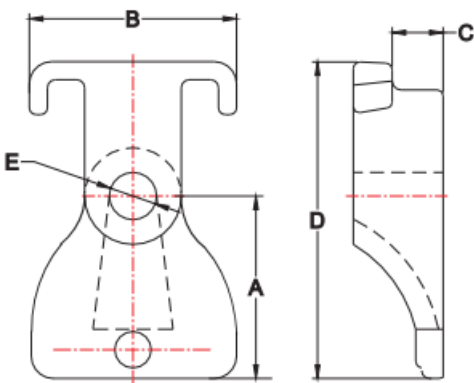


FIG.1

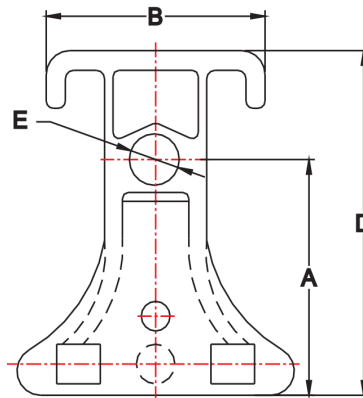


FIG.2

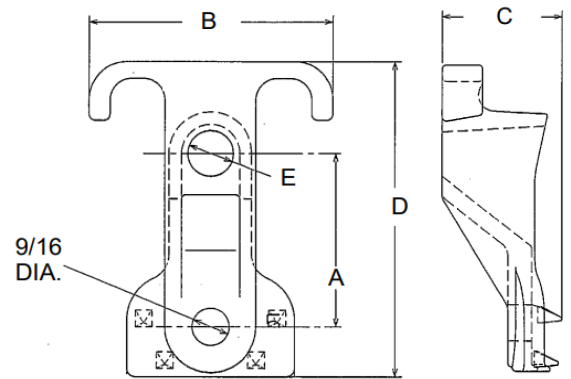


FIG.3

CATALOG NUMBER	FIG.NO.	OVERALL HEIGHT D	DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION E	APPROX WE./100
DGH5X	1	4 7/8"	2 5/8"	3 5/8"	2 1/4"	11/16"	143 LBS
DGH6X	1	4 7/8"	2 5/8"	3 5/8"	2 1/4"	13/16"	149 LBS
AGH7	2	6 1/2"	4 7/8"	4 7/8"	2 5/8"	15/16"	200 LBS
DGH5	3	4 3/4"	2 5/8"	3 5/8"	1 27/32"	11/16"	136 lbs

THE ABOVE GUY ATTACHMENTS ARE PRIMARILY USED AS A MEANS TO CONNECT GUYS TO POLES FOR DGH5X AND DGH6X, TO ORDER WITHOUT TEETH, REMOVE LAST LETTER OF THE PART NUMBER, EXAMPLE DGH5X TO DGH5.

THE MATERIAL ON FIGURE 1 IS DUCTILE IRON. HOT DIPPED GALVANIZED TO ASTM A153.

THE MATERIAL ON FIGURE 2 IS A356-T6 ALUMINUM ALLOY.



COMBINATION ATTACHMENTS & POLE EYE PLATES

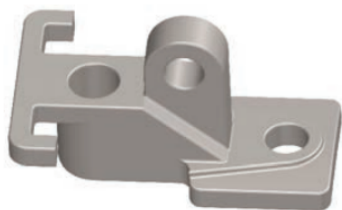


FIG. 1

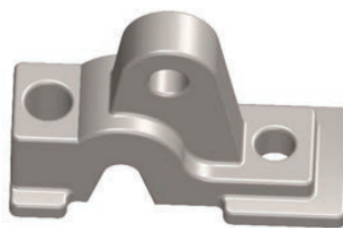
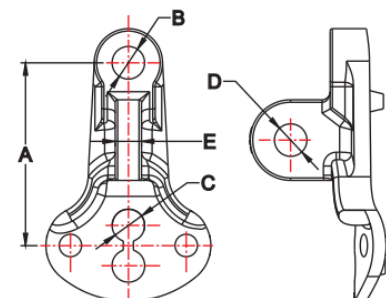
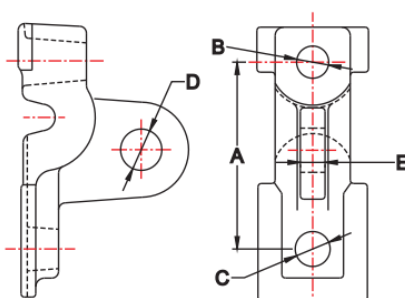
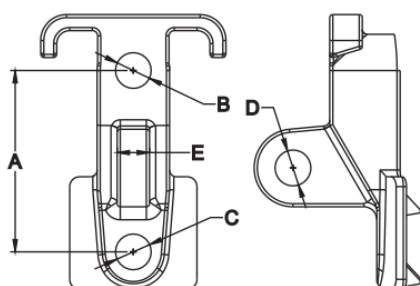


FIG. 2



FIG. 3



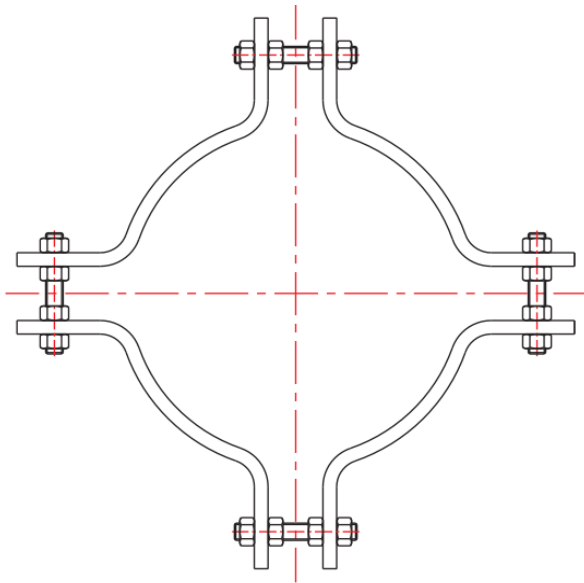
CATALOG NUMBER	FIG.NO.	OVERALL HEIGHT "A"	DIMENSION "B"	DIMENSION "C"	DIMENSION "D"	DIMENSION "E"	MIN.ULTIMATE STRENGTH	APPROX WE./100
CGA58	1	3"	13/16"	11/16"	11/16"	11/16"	16,000 LBS	188 LBS
CGA34	1	3"	13/16"	11/16"	13/16"	13/16"	16,000 LBS	188 LBS
UGA34-4	2	4"	13/16"	13/16"	13/16"	—	21,000 LBS	255 LBS
UGA58-4	2	4"	13/16"	11/16"	11/16"	11/16"	21,000 LBS	238 LBS
UGA78-6	2	6"	15/16"	15/16"	15/16"	—	35,000 LBS	510 LBS
PEP88	3	5"	13/16"	13/16"	13/16"	3/4"	21,000 LBS	275 LBS

THE ABOVE UNIVERSAL GUY ATTACHMENTS OFFER THE INSTALLER THE ABILITY TO TERMINATE GUYWIRE OR FIBERGLASS GUY LINKS.

FIGURE #3 TAKES THE POLE EYE PLATE A STEP FURTHER, BY ALLOWING ANY GUYING OR DEADENDING ANGLE UP TO 90 DEGREES. PLATE MAY BE MOUNTED WITH BOLTS OR COMBINATION OF BOLTS AND LAG SCREWS, TO ORDER FIGURE #1 WITHOUT TEETH (FOR USE ON CONCRETE POLES) ADD -NT TO THE PART NUMBER. MATERIAL: DUCTILE IRON HOT DIPPED GALVANIZED TO ASTM A153. TO ORDER PARTS WITHOUT TEETH, ADD A "LT" TO THE END OF THE CATALOG NUMBER. (EXAMPLE CGA58LT)



ADJUSTABLE POLE BANDS

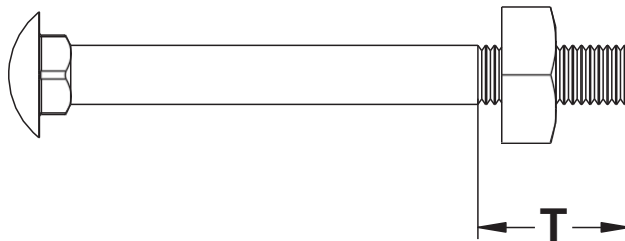


CATALOG NUMBER	TYPE	POLE DIAMETER	STUD BOLT SIZE	LAG HOLE DIAMETER	FLAT STEEL SIZE	APPROX. WEIGHT PER 100
U6643	4 WAY 90 DEGREE	7" - 9 1/2"	3/4" X 6"	9/16"	5/16" X 3"	1575 LBS.
U6644	4 WAY 90 DEGREE	8" - 11"	3/4" X 6"	9/16"	1/4" X 4"	1242 LBS.
U6646	3 WAY 90 DEGREE	8" - 12"	3/4" X 6"	9/16"	1/4" X 4"	1339 LBS.
U6684	4 WAY 90 DEGREE	11" - 16"	3/4" X 6"	9/16"	1/4" X 4"	1745 LBS.
U2032	4 WAY 90 DEGREE	9 1/2" - 16"	3/4" X 8"	9/16"	1/4" X 4"	2820 LBS.

THE ABOVE STEEL POLE BANDS ARE ADJUSTABLE TO BE USED ON A WIDE RANGE OF WOOD POLES. THE MATERIAL IS HOT DIPPED GALVANIZED STEEL TO ASTM A153. OTHER TYPES OF POLE BANDS AND THEIR ACCESSORIES ARE AVAILABLE UPON REQUEST. PLEASE CONTACT GPP FOR YOUR SPECIFIC NEEDS.



CARRIAGE BOLTS

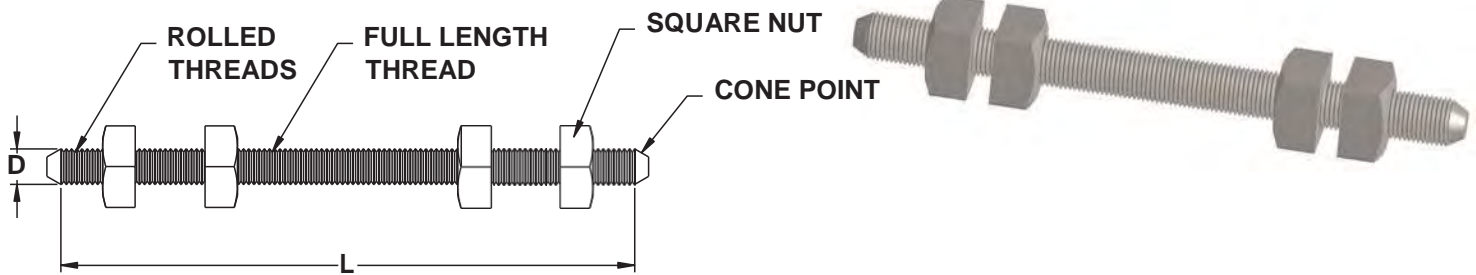


CATALOG NUMBER	BOLT DIMENSION	THREAD LENGTH T	APPROX. WEIGHT PER 100
U8633	3/8" X 3"	2"	12 LBS.
U8634	3/8" X 4"	3"	14 LBS.
U8634-1/2	3/8" X 4 1/2"	3"	16 LBS.
U8635	3/8" X 5"	3"	17 LBS.
U8635-1/2	3/8" X 5 1/2"	3"	18 LBS.
U8636	3/8" X 6"	3"	19 LBS.
U8637	3/8" X 7"	3"	22 LBS.
U8638	3/8" X 8"	3"	24 LBS.
U8640	3/8" X 10"	6"	29 LBS.
U8642	3/8" X 12"	6"	34 LBS.
U8644-1/2	1/2" X 4 1/2"	3"	30 LBS.
U8645	1/2" X 5"	3"	32 LBS.
U8645-1/2	1/2" X 5 1/2"	3"	35 LBS.
U8646	1/2" X 6"	3"	36 LBS.
U8647	1/2" X 7"	4"	41 LBS.
U8648	1/2" X 8"	4"	46 LBS.

THE ABOVE CARRIAGE BOLTS HAVE ROLLED THREADS WITH A SQUARE SHOULDER.
EACH IS FURNISHED WITH ONE SQUARE NUT.
THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



DOUBLE ARMING BOLTS



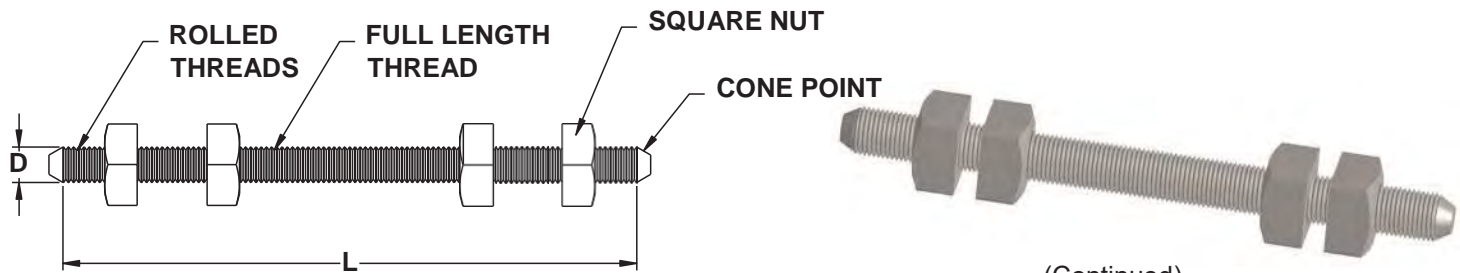
CATALOG NUMBER	BOLT DIMENSION D L	MINIMUM TENSILE STRENGTH	APPROX. WEIGHT PER 100
U8860	5/8" X 10"	13550 LBS.	120 LBS.
U8862	5/8" X 12"	13550 LBS.	132 LBS.
U8864	5/8" X 14"	13550 LBS.	144 LBS.
U8866	5/8" X 16"	13550 LBS.	164 LBS.
U8868	5/8" X 18"	13550 LBS.	180 LBS.
U8870	5/8" X 20"	13550 LBS.	192 LBS.
U8872	5/8" X 22"	13550 LBS.	212 LBS.
U8874	5/8" X 24"	13550 LBS.	224 LBS.
U8876	5/8" X 26"	13550 LBS.	240 LBS.
U8877	5/8" X 28"	13550 LBS.	256 LBS.
U8878	5/8" X 30"	13550 LBS.	264 LBS.
U8879	5/8" X 32"	13550 LBS.	284 LBS.
U8880	5/8" X 34"	13550 LBS.	296 LBS.
U8881	5/8" X 36"	13550 LBS.	332 LBS.
U8883	3/4" X 10"	20050 LBS.	167 LBS.
U8882	3/4" X 12"	20050 LBS.	196 LBS.
U8884	3/4" X 14"	20050 LBS.	220 LBS.
U8886	3/4" X 16"	20050 LBS.	240 LBS.
U8888	3/4" X 18"	20050 LBS.	260 LBS.
U8890	3/4" X 20"	20050 LBS.	284 LBS.
U8892	3/4" X 22"	20050 LBS.	304 LBS.

(Continued on next page)

THE ABOVE DOUBLE ARMING BOLTS ARE FURNISHED WITH FOUR SQUARE NUTS . THE CONE POINTS AT EACH END ALLOW THE INSTALLER TO EASILY DRIVE THE BOLTS WITHOUT DAMAGING THE THREADS.
THE MATERIAL ON THE ABOVE BOLTS IS STEEL TO ASTM A663 OR A675 AND HOT DIPPED GALVANIZED TO A153.
HIGH STRENGTH BOLTS ARE ALSO AVAILABLE UPON REQUEST. MATERIAL WOULD THEN BE OF A325 STEEL.
FOR HIGH STRENGTH BOLTS ADD THE SUFFIX "H" TO THE CATALOG NUMBER. (EXAMPLE: U8866H)
MINIMUM ORDER QUANTITIES MAY APPLY FOR THESE HIGH STRENGTH BOLTS.
Suffix "C " indicates compliance with Charpy Lvl 1 test CSA C83-96



DOUBLE ARMING BOLTS



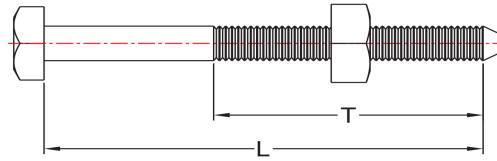
(Continued)

CATALOG NUMBER	BOLT DIMENSION D L	MINIMUM TENSILE STRENGTH	APPROX. WEIGHT PER 100
U8894	3/4" X 24"	20050 LBS.	336 LBS.
U8896	3/4" X 26"	20050 LBS.	345 LBS.
U8897	3/4" X 28"	20050 LBS.	365 LBS.
U8898	3/4" X 30"	20050 LBS.	386 LBS.
U8899	3/4" X 32"	20050 LBS.	400 LBS.
U9003	3/4" X 34"	20050 LBS.	420 LBS.
U9004	3/4" X 36"	20050 LBS.	460 LBS.
U9112	7/8" X 12"	27700 LBS.	273 LBS.
U9114	7/8" X 14"	27700 LBS.	302 LBS.
U9116	7/8" X 16"	27700 LBS.	332 LBS.
U9118	7/8" X 18"	27700 LBS.	362 LBS.
U9120	7/8" X 20"	27700 LBS.	391 LBS.
U9122	7/8" X 22"	27700 LBS.	421 LBS.
U9124	7/8" X 24"	27700 LBS.	451 LBS.
U9126	7/8" X 26"	27700 LBS.	480 LBS.
U9128	7/8" X 28"	27700 LBS.	510 LBS.
U9130	7/8" X 30"	27700 LBS.	540 LBS.
U9132	7/8" X 32"	27700 LBS.	569 LBS.
U9134	7/8" X 34"	27700 LBS.	599 LBS.
U9136	7/8" X 36"	27700 LBS.	629 LBS.
U9138	7/8" X 38"	27700 LBS.	659 LBS.
U9140	7/8" X 40"	27700 LBS.	688 LBS.
U9142	7/8" X 42"	27700 LBS.	718 LBS.

THE ABOVE DOUBLE ARMING BOLTS ARE FURNISHED WITH FOUR SQUARE NUTS . THE CONE POINTS AT EACH END ALLOW THE INSTALLER TO EASILY DRIVE THE BOLTS WITHOUT DAMAGING THE THREADS. THE MATERIAL ON THE ABOVE BOLTS IS STEEL TO ASTM A663 OR A675 AND HOT DIPPED GALVANIZED TO A153. HIGH STRENGTH BOLTS ARE ALSO AVAILABLE UPON REQUEST. MATERIAL WOULD THEN BE OF A325 STEEL. FOR HIGH STRENGTH BOLTS ADD THE SUFFIX "H" TO THE CATALOG NUMBER. (EXAMPLE: U8896H) MINIMUM ORDER QUANTITIES MAY APPLY FOR THESE HIGH STRENGTH BOLTS. Suffix "C " indicates compliance with Charpy Lvl 1 test CSA C83-96



GALVANIZED MACHINE BOLTS



MIN. TENSILE STRENGTH	
1/2"	8500 LBS.
5/8"	13550 LBS.
3/4"	20050 LBS.
7/8"	27700 LBS.

CATALOG NUMBER 1/2" DIA.	BOLT LENGTH L	THREAD LENGTH T	APPROX. WEIGHT PER 100
U8701-1/2	1 1/2"	1 1/4"	18 LBS.
U8702	2"	1 1/4"	20 LBS.
U8702-1/2	2 1/2"	1 1/4"	22 LBS.
U8703	3"	1 1/4"	25 LBS.
U8704	4"	3"	29 LBS.
U8704-1/2	4 1/2"	3"	31 LBS.
U8705	5"	3"	33 LBS.
U8706	6"	3"	38 LBS.
U8707	7"	4"	42 LBS.
U8708	8"	4"	46 LBS.
U8709	9"	4"	51 LBS.
U8710	10"	6"	55 LBS.
U8712	12"	6"	64 LBS.
U8714	14"	6"	73 LBS.
U8716	16"	6"	82 LBS.

CATALOG NUMBER 3/4" DIA.	BOLT LENGTH L	THREAD LENGTH T	APPROX. WEIGHT PER 100
U8908	8"	4"	120 LBS.
U8910	10"	6"	141 LBS.
U8912	12"	6"	171 LBS.
U8914	14"	6"	182 LBS.
U8916	16"	6"	203 LBS.
U8918	18"	6"	225 LBS.
U8920	20"	6"	245 LBS.
U8922	22"	6"	265 LBS.
U8924	24"	6"	285 LBS.
U8926	26"	6"	305 LBS.

CATALOG NUMBER DIA. 5/8"	BOLT LENGTH L	THREAD LENGTH T	APPROX. WEIGHT PER 100
U8801-1/2	1 1/2"	1 1/4"	30 LBS.
U8802	2"	1 1/2"	34 LBS.
U8802-1/2	2 1/2"	1 1/2"	38 LBS.
U8803	3"	1 1/2"	44 LBS.
U8804	4"	3"	50 LBS.
U8805	5"	3"	59 LBS.
U8806	6"	3"	66 LBS.
U8807	7"	3"	73 LBS.
U8808	8"	4"	80 LBS.
U8809	9"	4"	87 LBS.
U8810	10"	6"	94 LBS.
U8812	12"	6"	107 LBS.
U8814	14"	6"	121 LBS.
U8816	16"	6"	135 LBS.
U8818	18"	6"	150 LBS.
U8820	20"	6"	166 LBS.
U8822	22"	6"	180 LBS.
U8824	24"	6"	193 LBS.
U8826	26"	6"	224 LBS.
U8828	28"	6"	242 LBS.
U8830	30"	6"	262 LBS.

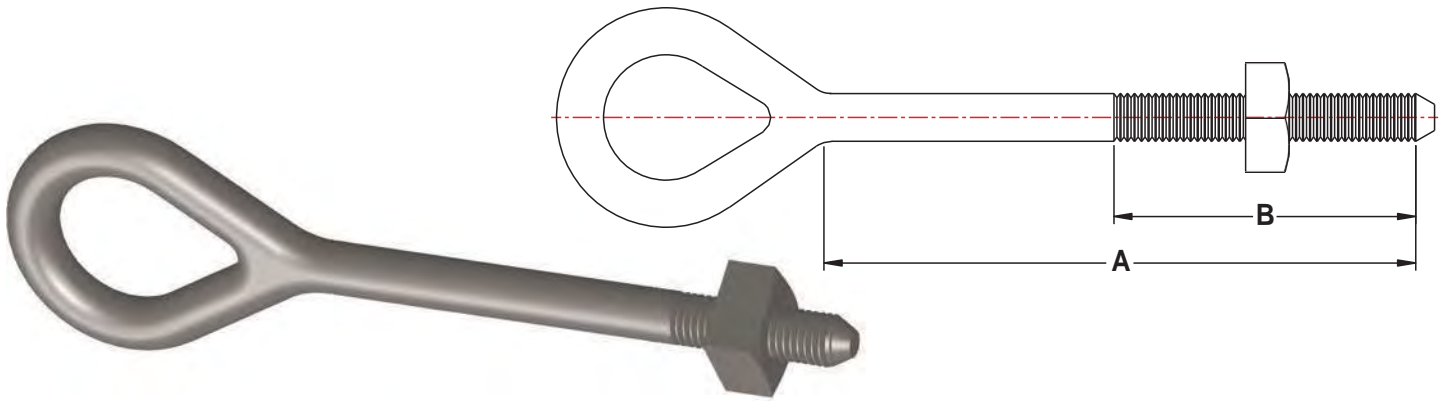
CATALOG NUMBER DIA. 7/8"	BOLT LENGTH L	THREAD LENGTH T	APPROX. WEIGHT PER 100
U9064	14"	6"	260 LBS.
U9066	16"	6"	289 LBS.
U9068	18"	6"	317 LBS.
U9070	20"	6"	346 LBS.
U9072	22"	6"	374 LBS.
U9074	24"	6"	403 LBS.

ALL BOLTS ARE STEEL HOT DIPPED GALVANIZED TO ASTM A153. EACH HAS ROLLED THREADS AND ONE SQUARE NUT.

Suffix C indicates compliance with Charpy Lvl 1 Test CSA C83-96



GALVANIZED OVAL EYE BOLTS



CATALOG NUMBER	BOLT DIMENSION			MINIMUM TENSILE STRENGTH	APPROX. WEIGHT PER 100
	DIA.	A	B		
U9406	5/8"	6"	4"	13550 LBS.	100 LBS.
U9408	5/8"	8"	4"	13550 LBS.	118 LBS.
U9409	5/8"	9"	4"	13550 LBS.	123 LBS.
U9410	5/8"	10"	6"	13550 LBS.	129 LBS.
U9412	5/8"	12"	6"	13550 LBS.	142 LBS.
U9414	5/8"	14"	6"	13550 LBS.	158 LBS.
U9416	5/8"	16"	6"	13550 LBS.	175 LBS.
U9418	5/8"	18"	6"	13550 LBS.	190 LBS.
U9420	5/8"	20"	6"	13550 LBS.	205 LBS.
U9422	5/8"	22"	6"	13550 LBS.	238 LBS.
U9424	5/8"	24"	6"	13550 LBS.	245 LBS.
U9426	5/8"	26"	6"	13550 LBS.	258 LBS.
U9430	5/8"	30"	6"	13550 LBS.	315 LBS.
U9436	5/8"	36"	6"	13550 LBS.	355 LBS.
U9508	3/4"	8"	4"	20050 LBS.	190 LBS.
U9510	3/4"	10"	6"	20050 LBS.	215 LBS.
U9512	3/4"	12"	6"	20050 LBS.	225 LBS.
U9514	3/4"	14"	6"	20050 LBS.	255 LBS.
U9516	3/4"	16"	6"	20050 LBS.	275 LBS.
U9518	3/4"	18"	6"	20050 LBS.	298 LBS.
U9520	3/4"	20"	6"	20050 LBS.	330 LBS.

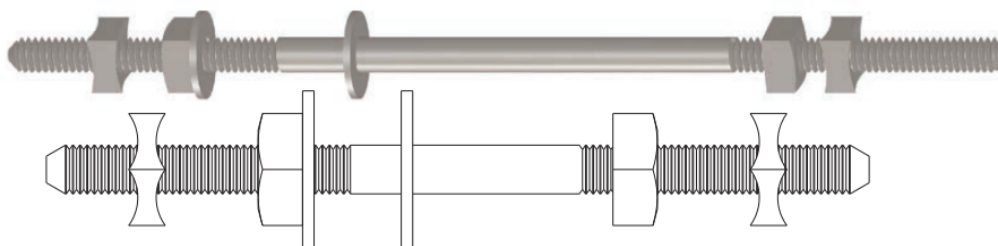
THE ABOVE OVALEYE BOLTS ARE FURNISHED WITH ONE SQUARE NUT. THE CONE POINT AT THE END ALLOWS THE INSTALLER TO EASILY DRIVE THE BOLTS WITHOUT DAMAGING THE THREADS.

THE MATERIAL ON THESE BOLTS IS STEEL TO ASTM A663 OR A675 AND HOT DIPPED GALVANIZED TO A153. OTHER SIZES ARE AVAILABLE UPON REQUEST. MINIMUM ORDER QUANTITIES MAY APPLY FOR THESE BOLTS.

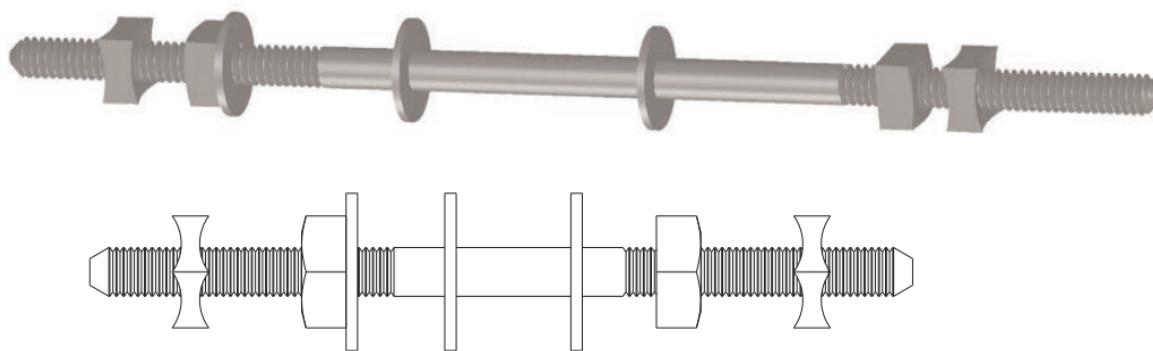
Suffix "C " indicates compliance with Charpy Lvl 1 test CSA C83-96



UPSET SPOOL BOLTS



SINGLE UPSET SPOOL BOLT



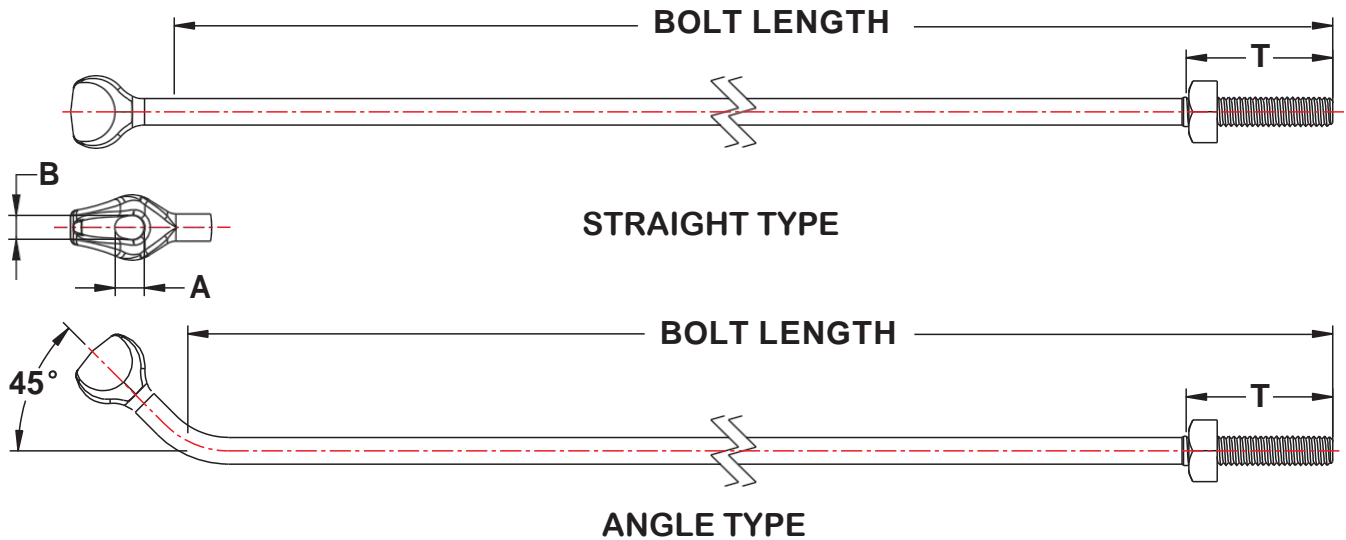
DOUBLE UPSET SPOOL BOLT

CATALOG NUMBER	ABOVE TYPE	THREAD	SHANK LENGTH	OVERALL LENGTH	THREAD LENGTH	APPROX. WEIGHT PER 100
U2343-1/2	SINGLE	5/8"	9"	13 1/2"	4"	150 LBS
U2344-1/2	SINGLE	5/8"	10"	14 1/2"	4"	167 LBS
U2346-1/2	SINGLE	5/8"	12"	16 1/2"	6"	181 LBS
U2348-1/2	SINGLE	5/8"	14"	18 1/2"	6"	237 LBS
U2395	DOUBLE	5/8"	9"	15"	4"	170 LBS
U2396	DOUBLE	5/8"	10"	16"	4"	190 LBS
U2398	DOUBLE	5/8"	12"	18"	6"	198 LBS

THE ABOVE SPOOL BOLTS PROVIDE ADDED CLEARANCE BETWEEN INSULATOR AND POLE. THESE BOLTS COME COMPLETE WITH TWO SQUARE NUTS, MF TYPE LOCKNUT AND A LOCKING PIN. OTHER SIZES ARE AVAILABLE UPON REQUEST. MINIMUM ORDER QUANTITIES MAY APPLY FOR THESE BOLTS. THE MATERIAL IS FORGED CARBON STEEL, HOT DIPPED GALVANIZED TO ASTM A153.



THIMBLE EYE BOLTS

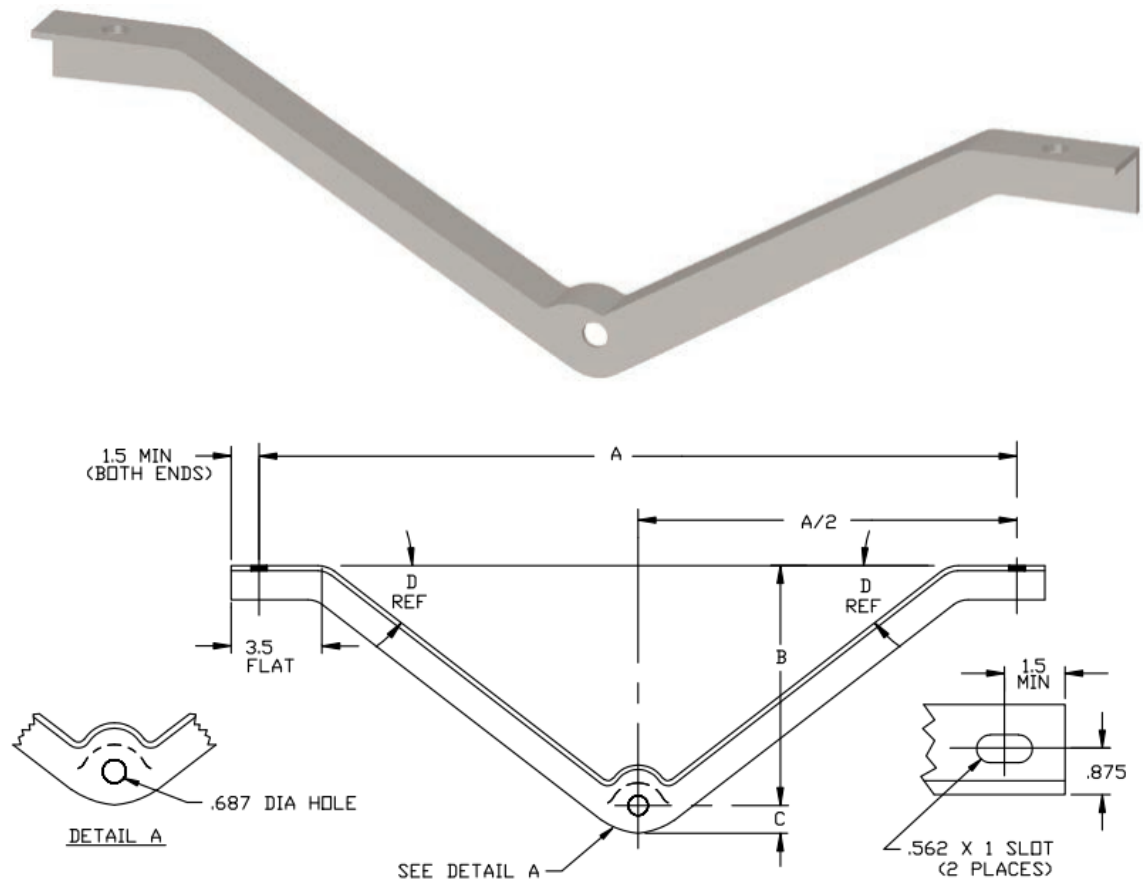


CATALOG NUMBER	BOLT TYPE	BOLT DIMENSION	THREAD LENGTH	DIMENSION A	DIMENSION B	APPROX. WEIGHT PER 100
U8050	STRAIGHT	5/8" X 8"	4"	11/16"	9/16"	143 LBS.
U8051	STRAIGHT	5/8" X 10"	4"	11/16"	9/16"	157 LBS.
U8052	STRAIGHT	5/8" X 12"	6"	11/16"	9/16"	170 LBS.
U8053	STRAIGHT	5/8" X 14"	6"	11/16"	9/16"	184 LBS.
U8054	STRAIGHT	5/8" X 16"	6"	11/16"	9/16"	197 LBS.
U8061	STRAIGHT	3/4" X 10"	4"	13/16"	11/16"	188 LBS.
U8062	STRAIGHT	3/4" X 12"	6"	13/16"	11/16"	207 LBS.
U8063	STRAIGHT	3/4" X 14"	6"	13/16"	11/16"	227 LBS.
U8151	ANGLE	5/8" X 10"	4"	11/16"	9/16"	161 LBS.
U8152	ANGLE	5/8" X 12"	6"	11/16"	9/16"	175 LBS.
U8153	ANGLE	5/8" X 14"	6"	11/16"	9/16"	188 LBS.
U8154	ANGLE	5/8" X 16"	6"	11/16"	9/16"	202 LBS.
U8161	ANGLE	3/4" X 10"	4"	13/16"	11/16"	188 LBS.
U8162	ANGLE	3/4" X 12"	6"	13/16"	11/16"	207 LBS.
U8163	ANGLE	3/4" X 14"	6"	13/16"	11/16"	227 LBS.

THE ABOVE THIMBLEYE BOLTS ARE USED AS A METHOD OF ATTACHING GUYS AND DEADENDS TO POLES AND CROSSARMS. THEY CAN ELIMINATE THE NEED OF THIMBLES, STRAIN PLATES, GUY HOOKS, AND EXTRA STRAND. THE 5/8" BOLTS HAVE AN ULTIMATE STRENGTH RATING OF 12400 LBS. THE 3/4" BOLTS ARE RATED 18350 LBS. THE MATERIAL USED IS FORGED STEEL HOT DIPPED GALVANIZED TO ASTM A153.



ANGLE DOUBLE SPAN BRACE

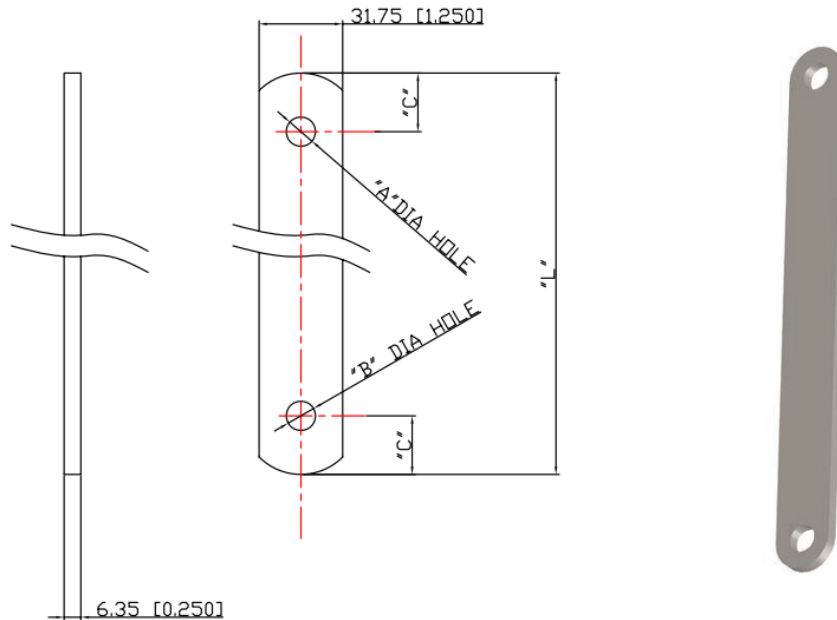


CATALOG NO.	ANGLE SIZE	A	B	C	D
U1506	1.5 X 1.5 X 0.187	42	12	0.625	32°
U1508	1.5 X 1.5 X 0.187	60	18	0.625	33°
U1510	1.75 X 1.75 X 0.187	60	18	0.625	33°
U1512	1.75 X 1.75 X 0.187	72	22	0.625	33°
U1514	1.5 X 1.5 X 0.187	48	18	0.625	39°

THE ABOVE STEEL BRACES ARE PRIMARILY USED TO HELP ALIGN AND SUPPORT CROSSARMS.
THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



FLAT CROSSARM BRACE

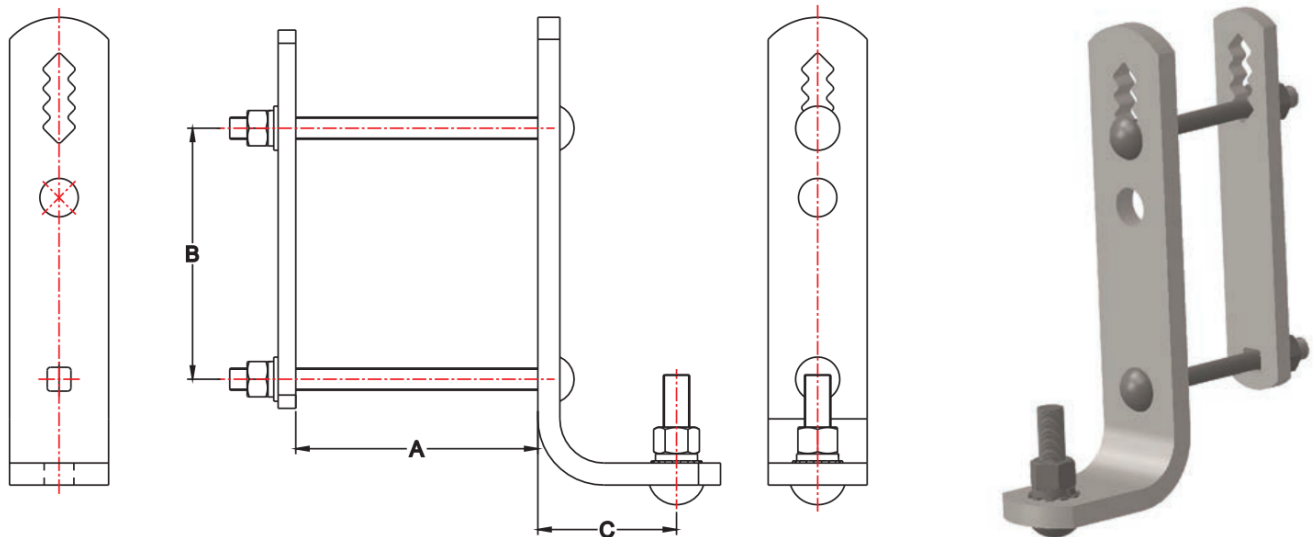


CAT.NO.	"L"	"A"	"B"	"C"
U7126	660.4[26]	11.1125[7/16]	14.2875[9/16]	25.4[1]
U7128	711.2[28]	11.1125[7/16]	14.2875[9/16]	25.4[1]
U7130	762[30]	11.1125[7/16]	14.2875[9/16]	25.4[1]
U7132	812.8[32]	11.1125[7/16]	14.2875[9/16]	25.4[1]
T203-0463	812.8[32]	11.1125[7/16]	14.2875[9/16]	25.4[1]
C203-0233	863.6[34]	14.2875[9/16]	14.2875[9/16]	25.4[1]
T203-0459	914.4[36]	11.1125[7/16]	14.2875[9/16]	25.4[1]

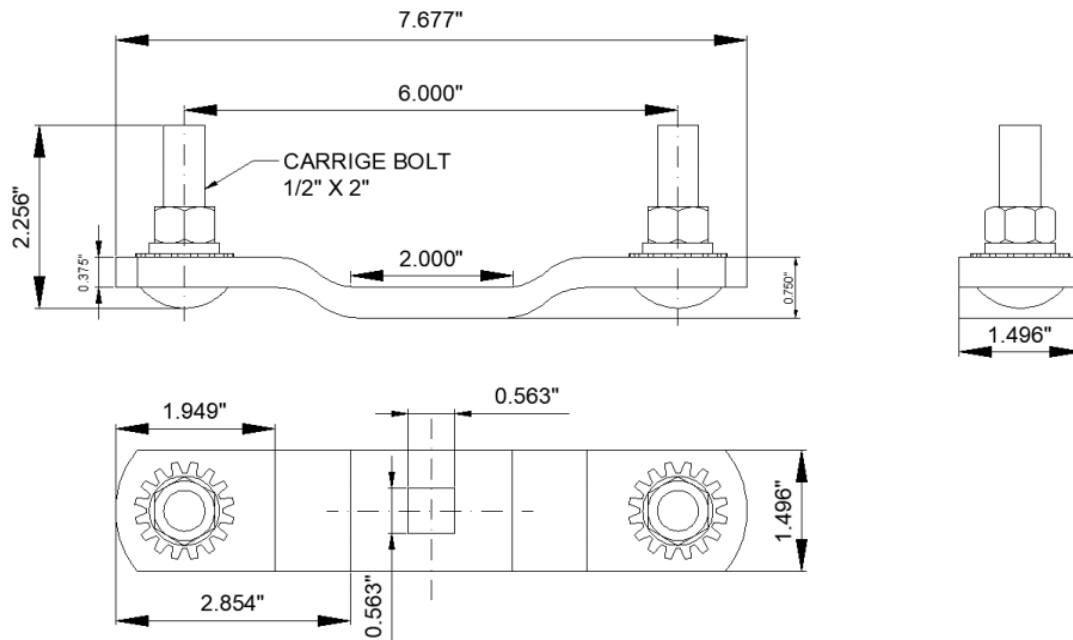
THE ABOVE STEEL BRACES ARE PRIMARILY USED TO HELP ALIGN AND SUPPORT CROSSARMS.
THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



CROSSARM MOUNTING BRACKETS



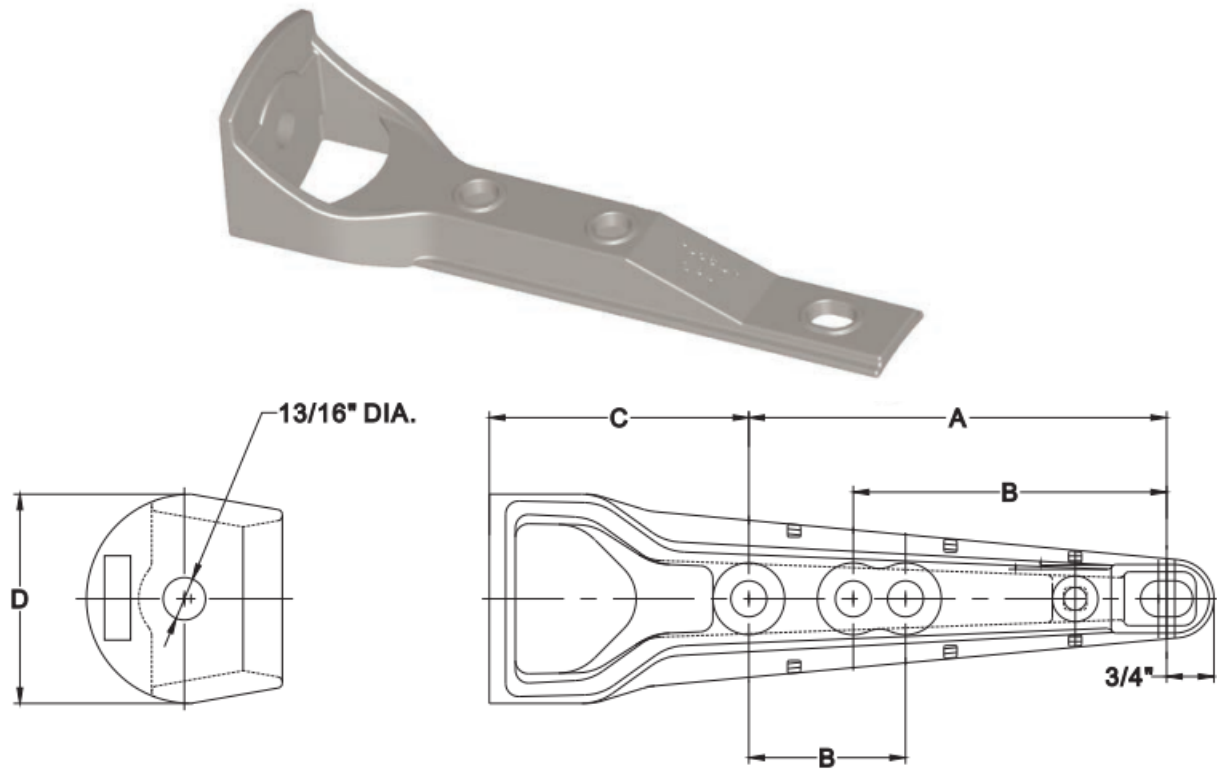
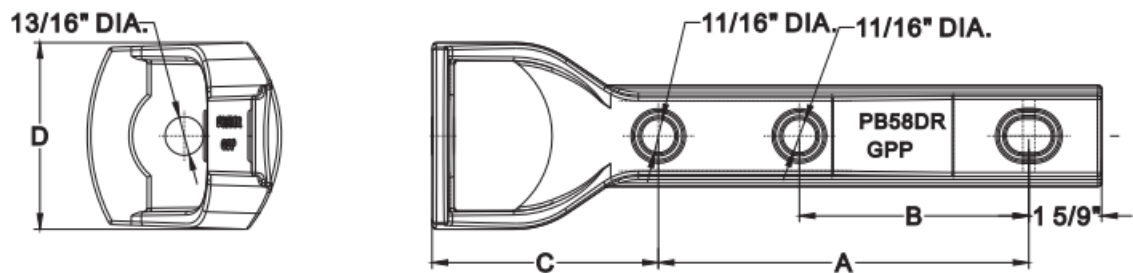
CATALOG NUMBER	BRACKET TYPE	ANGLE BRACKET STEEL SIZE	BRACK STRAP STEEL SIZE	DIMENSION "A"	DIMENSION "B"	DIMENSION "C"	WT. PER 100
U24515	NEMA TYPE "A" FIGURE 1	5/16" X 1 1/2"	1/4" X 1 1/4"	2 3/4" X 4"	4 1/8" - 5 1/4"	2 1/4"	250 LBS.
U24512	NEMA TYPE "B" FIGURE 1	3/8" X 1 3/4"	1/4" X 1 1/4"	2 3/4" X 4"	4 1/8" - 5 1/4"	2 1/4"	300 LBS.



CATALOG NUMBER	Weight /100(lbs)
U1404	138

Material.Steel hot dip galvanized

POLE TOP BRACKETS

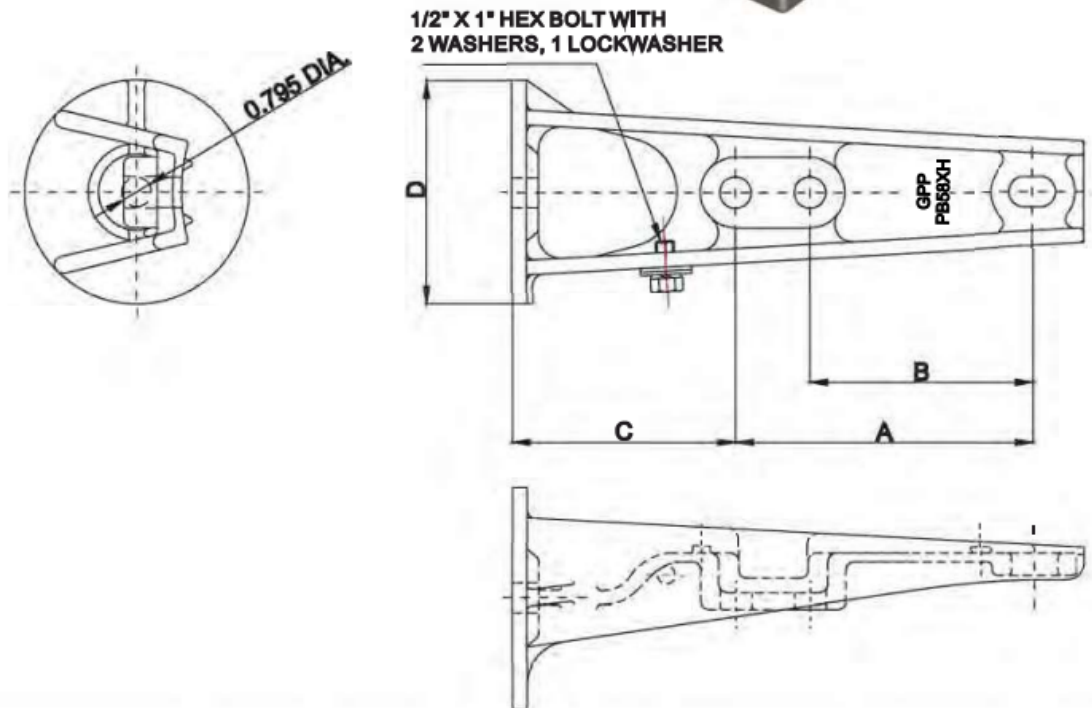

FIG. 1


CATALOG NUMBER	FIG. NO.	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	MAXIMUM VOLTAGE CLASS	MIN. ULTIMATE BENDING MOMENT AT BASE	WEIGHT EACH
PB58	1	8"	5"	5"	4 1/8"	35	34,000	5.5 LBS.
PB58H	1	8"	5"	6"	4 1/2"	69	50,000	6.5 LBS.
PB58DR	2	7 7/8"	4 7/8"	4 4/5"	4"	35	34,000	5.3 LBS.

THE MATERIAL ON THE ABOVE POLE TOP BRACKETS IS DUCTILE IRON TO ASTM 65 -45-12
HOT DIPPED GALVANIZED TO ASTM A 153 .



POLE TOP BRACKET

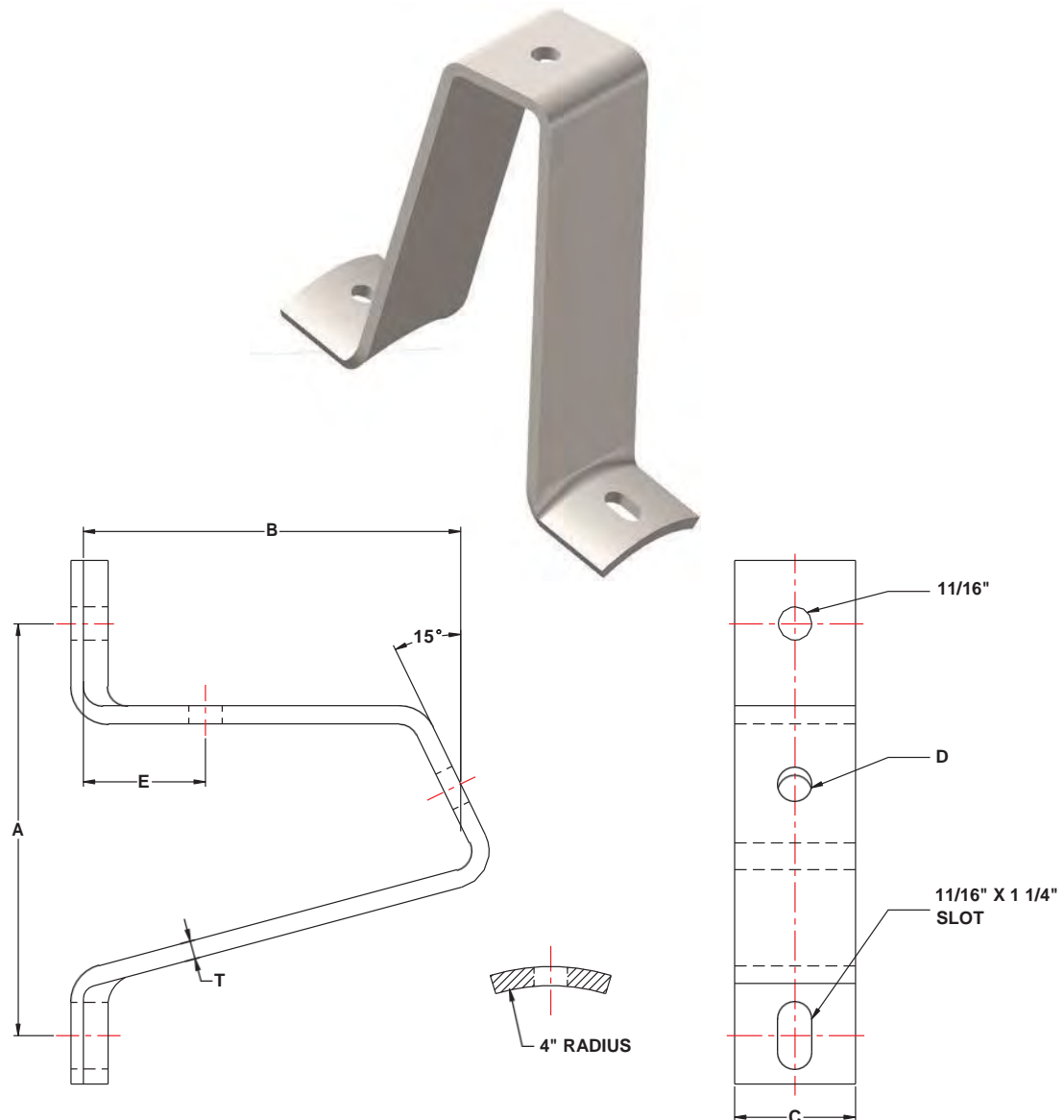


CATALOG NUMBER	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"	MAXIMUM VOLTAGE CLASS	APPLY BOLT	WEIGHT EACH
PB-58XH	8"	6"	6"	6"	0.795"	69	5/8-3/4 STUD BOLT	12 LBS
PB-58XHx	8"	6"	6"	6"	0.938"	69	3/4-7/8 STUD BOLT	12 LBS

THE MATERIAL ON THE ABOVE POLE TOP BRACKETS IS DUCTILE IRON TO ASTM 65-45-12 HOT DIPPED GALVANIZED TO ASTM A 153.



INSULATOR BRACKETS SIDE POST TYPE

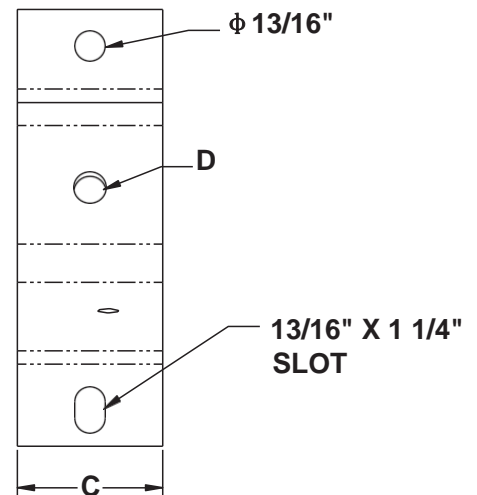
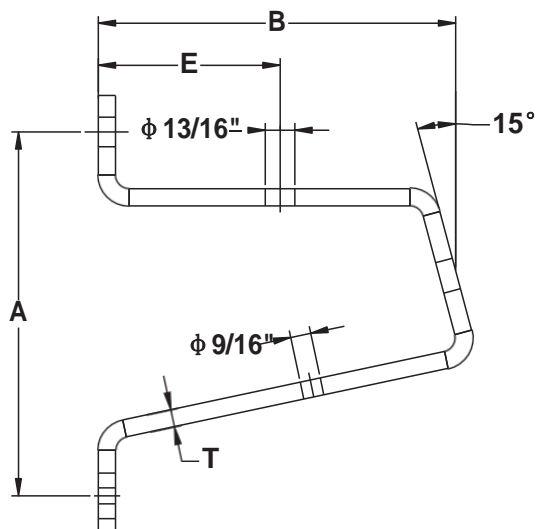


CATALOG NUMBER	DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	DIMENSION E	THICKNESS T	WEIGHT EACH
SPB 1075	10"	7 1/2"	3"	11/16"	3"	5/16"	7 LBS.
SPB 10120	10"	12"	4"	13/16"	4 1/2"	3/8"	14 LBS.

THE ABOVE SIDE POST INSULATOR BRACKETS ARE USED FOR MOUNTING POST TYPE INSULATORS. FOR ROUND POLE USE, THE BASE IS CURVED IN ORDER TO ESTABLISH A CONTOUR FIT TO THE POLE. THESE BRACKETS GIVE THE INSTALLER THE ABILITY TO MOUNT THE INSULATOR IN A PHASE OVER PHASE CONSTRUCTION OR ON OPPOSITE SIDES OF EACH OTHER FOR "ARMLESS" CONSTRUCTION. OTHER SIZES AVAILABLE UPON REQUEST. MINIMUM ORDER QUANTITY MAY BE REQUIRED.



INSULATOR BRACKETS SIDE POST TYPE

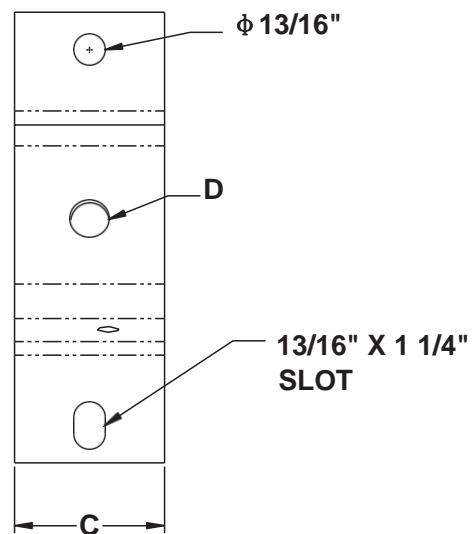
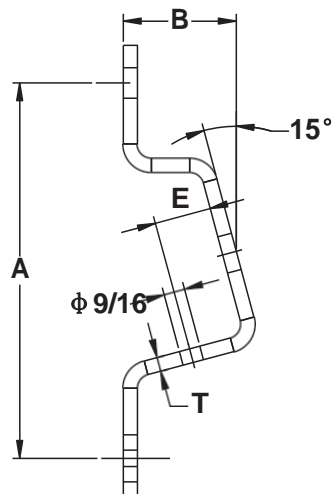


CATALOG NUMBER	DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	DIMENSION E	THICKNESS T	WEIGHT EACH
SPB 1010919	10"	10"	4"	13/15"	5"	9/19"	14.8 LBS.

THE ABOVE SIDE POST INSULATOR BRACKETS ARE USED FOR MOUNTING POST TYPE INSULATORS. THESE BRACKETS GIVE THE INSTALLER THE ABILITY TO MOUNT THE INSULATOR IN A PHASE OVER PHASE CONSTRUCTION OR ON OPPOSITE SIDES OF EACH OTHER FOR "ARMLESS" CONSTRUCTION. OTHER SIZES AVAILABLE UPON REQUEST. MINIMUM ORDER QUANTITY MAY BE REQUIRED.



INSULATOR BRACKETS SIDE POST TYPE

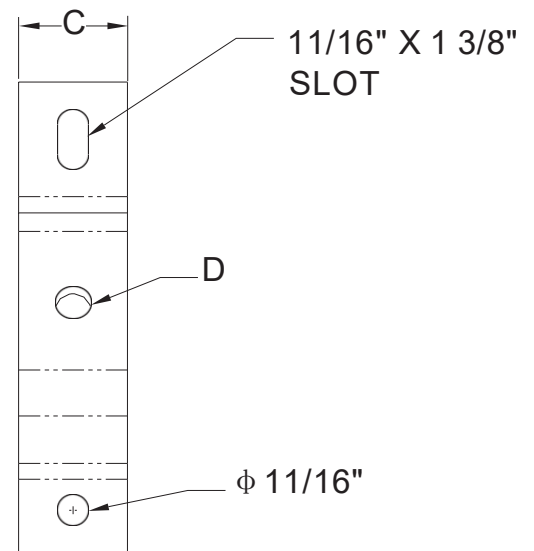
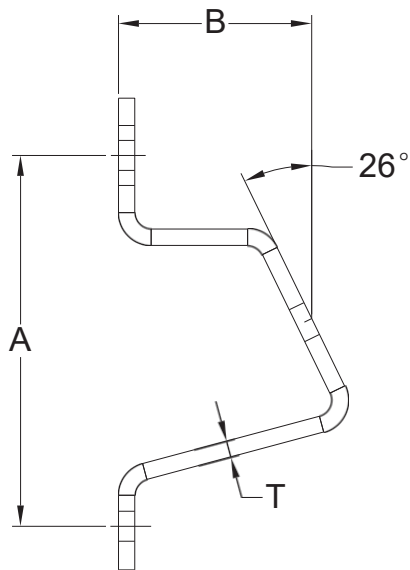


CATALOG NUMBER	DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	DIMENSION E	THICKNESS T	WEIGHT EACH
SPB 103038	10"	3"	4"	1"	1-1/2"	3/8"	6.614 LBS.
SPB 1030919	10"	3"	4"	1"	1-1/2"	9/16"	8.219 LBS.

THE ABOVE SIDE POST INSULATOR BRACKETS ARE USED FOR MOUNTING POST TYPE INSULATORS. THESE BRACKETS GIVE THE INSTALLER THE ABILITY TO MOUNT THE INSULATOR IN A PHASE OVER PHASE CONSTRUCTION OR ON OPPOSITE SIDES OF EACH OTHER FOR "ARMLESS" CONSTRUCTION. OTHER SIZES AVAILABLE UPON REQUEST. MINIMUM ORDER QUANTITY MAY BE REQUIRED.



INSULATOR BRACKETS SIDE POST TYPE



CATALOG NUMBER	DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	THICKNESS T	WEIGHT EACH
SPB 525FB	8 1/2"	4 3/8"	2 1/2"	13/16"	3/8"	4.48 LBS.

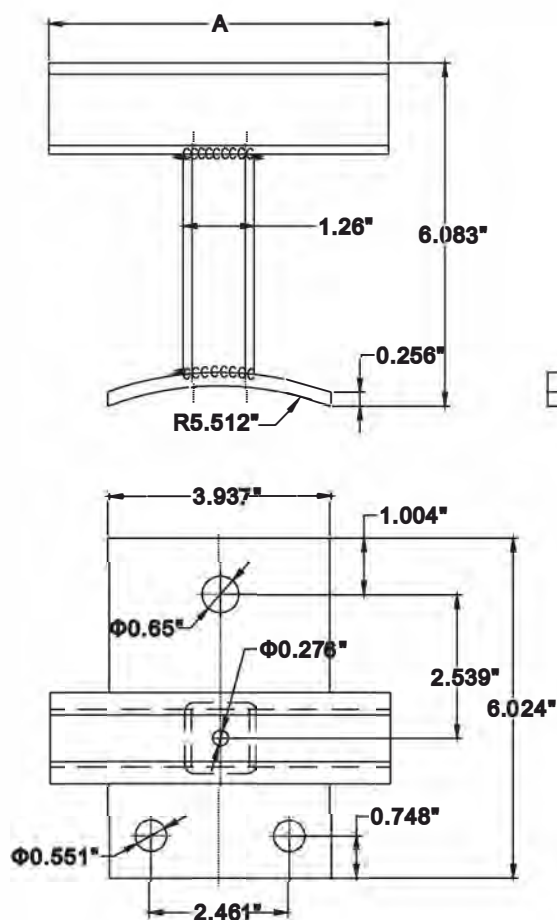
THE ABOVE SIDE POST INSULATOR BRACKETS ARE USED FOR MOUNTING POST TYPE INSULATORS. THESE BRACKETS GIVE THE INSTALLER THE ABILITY TO MOUNT THE INSULATOR IN A PHASE OVER PHASE CONSTRUCTION OR ON OPPOSITE SIDES OF EACH OTHER FOR "ARMLESS" CONSTRUCTION. OTHER SIZES AVAILABLE UPON REQUEST. MINIMUM ORDER QUANTITY MAY BE REQUIRED.



STANDOFF BRACKETS

Material

Steel hot dip galvanized



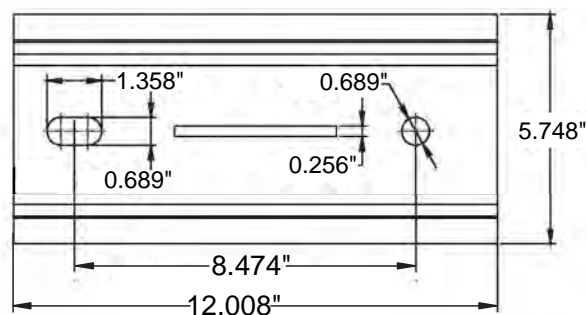
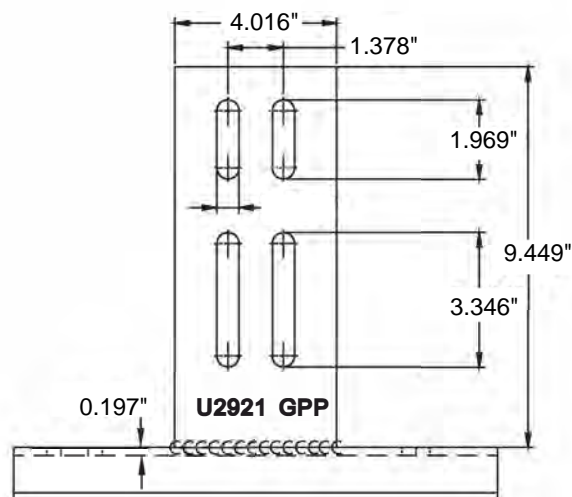
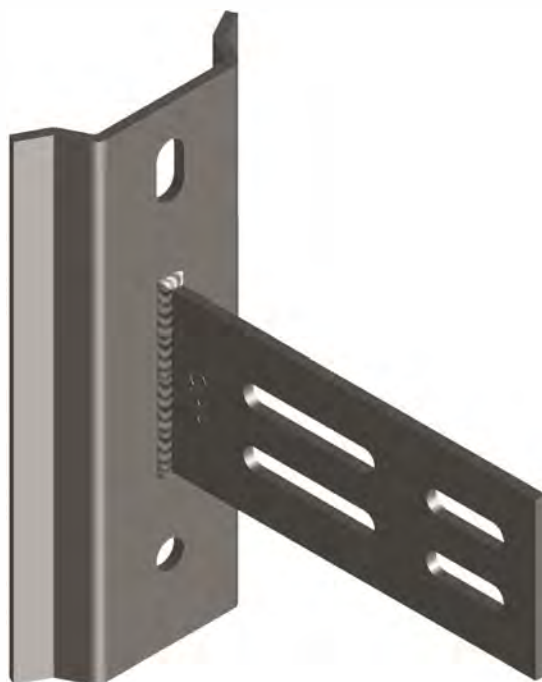
Catalog Number	DIMENSION A(MM)
SB-6-6	152.4
SB-6-16	406.4
SB-6-24	609.6



SINGLE OR DOUBLE CONDUIT SUPPORT BRACKET

Material

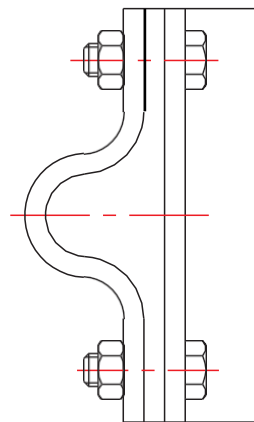
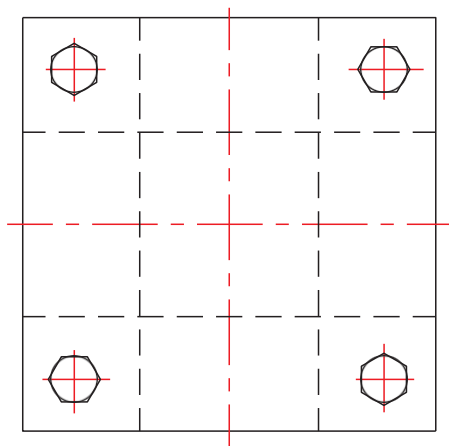
Steel hot dip galvanized



Catalog Number	Weight /100(lbs)
U2921	678



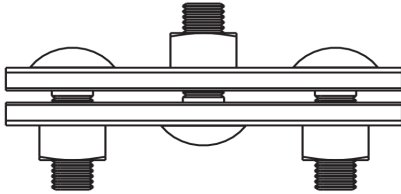
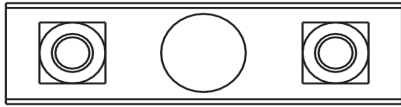
CROSSOVER CLAMPS



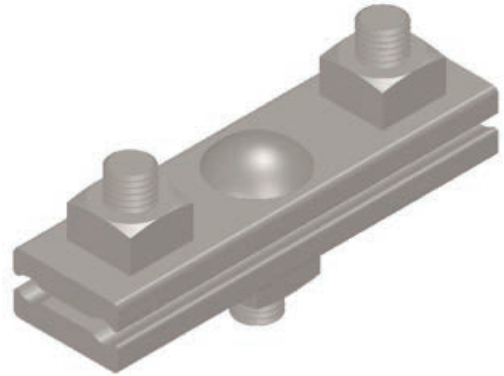
CATALOG NUMBER	CABLE RANGE	BOLT SIZE	APPROX. WEIGHT PER 100
U25564	3/16" TO 1/2"	3/8"	67 LBS.

THE ABOVE CATV CROSSOVER CLAMPS COME WITH TWO 3/8" CARRIAGE BOLTS AND NUTS. THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.

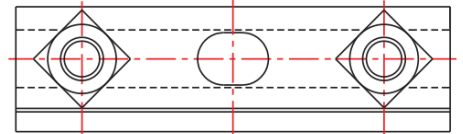
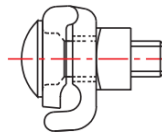
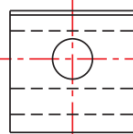
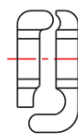
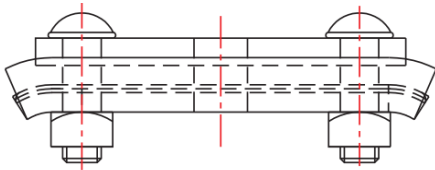
CABLE CLAMPS GUY & SUSPENSION



GUY CLAMP



CATALOG NUMBER	CLAMP TYOE	BOLT DIAMETER	CLAMP LENGTH	CLAMP WIDTH	ACCOMMADATES WIRE SIZE	WT. PER 100
U1061	1	1/2"	1 1/2"	1 9/16"	3/16" TO 3/8"	65 LBS
U1030	2	1/2"	3 3/8"	1 9/16"	3/16" TO 3/8"	147 LBS
U929	3	1/2"	4"	1 2/3"	3/16" TO 7/16"	179 LBS
U930	3	1/2"	5"	1 2/3"	3/16" TO 7/16"	250 LBS
U931	3	5/8"	6"	1 21/32"	5/16" TO 1/2"	270 LBS



ANGLE SUSPENSION

CLAMP SUSPENSION

CATALOG NUMBER	CLAMP TYOE	ACCOMMADATES WIRE SIZE	CLAMP LENGTH	MTG.HOLE DIAMETER	APPRPX.WEIGHT PER 100
U7901	ANGLE SUSPENSION	1/4" THRU 7/16"	5 3/4"	13/16"	208 LBS
U7901A	ANGLE SUSPENSION	1/4" THRU 7/16"	5 3/4"	11/16"	210 LBS
U7902B	ANGLE SUSPENSION	1/4" THRU 7/16"	6"	13/16"	385 LBS
U1095	1BOLT CABLE SUTP.	1/4" THRU 7/16"	2 1/2"	11/16"	67 LBS
U1096	1BOLT CABLE SUTP.	1/4" THRU 7/16"	5 3/4"	11/16" X 15/16"	180 LBS

THE ABOVE CABLE CLAMPS HAVE BOLTS THAT ARE EQUIPPED WITH A SHOULDER THAT WILL PREVENT THEM FROM TURNING WHILE THE INSTALLER IS TIGHTENING DOWN THE CLAMP.
 THE GUY CLAMPS HAVE PARALLEL GROVES THAT WILL TIGHTEN DOWN WITHOUT DAMAGING THE CABLE
 THE SUSPENSION CLAMPS ARE USED TO SECURE MESSENGER TO THE POLES AND ARE OFFERED IN A STRAIGHT CLAMP DESIGN AS WELL AS A CURVED ANGLE DESIGN. THE CURVE SEEN ON THE ABOVE ANGLE CLAMPS PREVENT DAMAGE TO THE CABLE WHILE TURNING SMALL ANGLES.

CLEVIS- DEADENDING & INSULATED STYLE

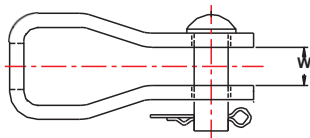
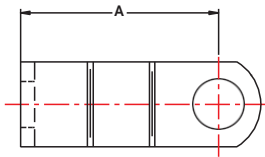


FIGURE 1

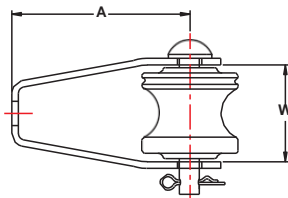


FIGURE 2

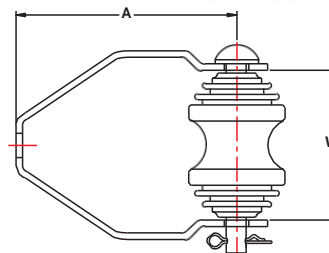


FIGURE 3

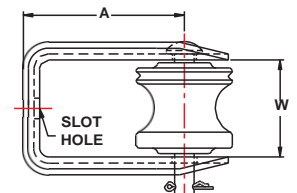


FIGURE 4

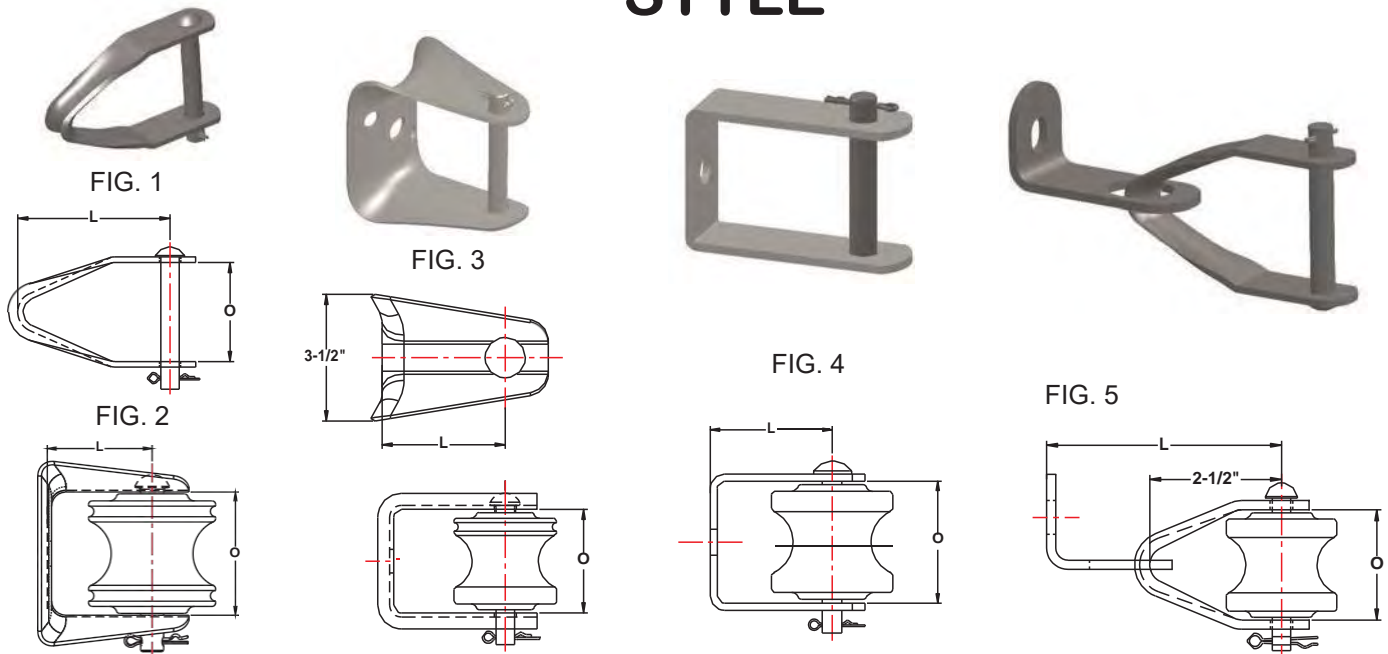
CATALOG NUMBER	FIGURE	STEEL SIZE	DIM A	DIM W	MOUNTING HOLE	PIN DIA	APPROX WEIGHT PER 100
U455	1	1 1/2" X 3/16"	3 1/2"	1 1/8"	11/16" X 13/16" SLOT	5/8"	95 LBS
U456	1	2" X 1 1/4"	4"	5/8"	13/16"	5/8"	175LBS
U0313	2	1 1/2" X 3/16"	4.13"	2 3/8"	0.69" X 0.75" SLOT	0.48"	115LBS
U0339	2	1 1/2" X 3/16"	4 3/16"	2 3/8"	11/16" X 13/16" SLOT	5/8"	122LBS
U0342	3	1 1/2" X 3/16"	5"	3 3/8"	0.69" X 0.75" SLOT	5/8"	150LBS
U0344	3	1 1/2" X 1/4"	5 3/4"	4 1/4"	11/16" X 7/8" SLOT	5/8"	240LBS
U1399	4	3" X 3/16"	4"	3.375"	11/16" X 7/8" SLOT	5/8"	194LBS
U1398	4	3" X 3/16"	3"	3.375"	11/16" X 7/8" SLOT	5/8"	163LBS

THE ABOVE CLEVISES ARE USED FOR DEADENDING OF SUSPENSION INSULATORS AND GUYS WITH USE OF EXTENSION LINKS. ALSO SHOWN ABOVE ARE SOME INSULATED CROSSARM CLEVISES. PLEASE ORDER INSULATORS SEPARATELY. REFER TO ANSI NUMBER WHEN REQUESTING INFORMATION ON SPOOLS.

THE MATERIAL USED IS HOT DIPPED GALVANIZED STEEL TO ASTM A153.



CLEVIS-SECONDARY & SWINGING STYLE



CATALOG NUMBER	FIGURE NUMBER	STEEL SIZE	DIMENSION "L"	DIMENSION "O"	MOUNTING HOLE	PIN DIAMETER	APPROX. WEIGHT PER 100
U0322	1	1 1/2" X 3/16"	5.06"	3 3/8"	—	5/8"	150 LBS.
U255	2	3" X 3/16"	4"	3 3/8"	11/16" SLOT	5/8" BOLT	227 LBS.
U1300	3	4 3/4" X NO. 11	4"	3.44"	0.69" X 0.88" SLOT	5/8"	231 LBS.
U251	3	NO. 12 GA	2 7/8"	3 2/5"	11/16" X 13/16" SLOT	5/8"	142 LBS.
U093	4	1" X 1/8" CHANNEL	4"	3 1/2"	0.675" SLOT	5/8"	121 LBS.
U93	4	1 1/2" X 3/16" CHANNEL	3.75"	3 3/8"	0.69" X 0.88" SLOT	5/8"	165 LBS.
U1626	5	1 1/2" X 3/16"	5"	2 1/4"	0.81" X 1.61" SLOT	0.36"	67 LBS.

THE ABOVE SWINGING CLEVISES SHOWN IN FIGURES #1 AND #5 ARE USED TO BALANCE THE STRAIN WHEN MOUNTING AT CORNERS. THE SAGGER BRACKET SHOWN IN FIGURE #2 CAN BE USED FOR BOTH STRINGING AND SAGGING THE CONDUCTOR. A COTTER BOLT THREADED INTO THE BOTTOM OF THE BRACKET ALLOWS A SPECIAL TWIST LOCK HEAD TO TIGHTEN INTO PLACE AT THE TOP OF THE BRACKET.

THE SECONDARY CLEVISES SHOWN IN FIGURES #3 AND #4 ARE DESIGNED TO HANDLE HIGH STRENGTH ON LINE PULLS OR DEADENDS. SPOOL INSULATORS ARE SOLD SEPARATELY.

THE MATERIAL USED IS HOT DIPPED GALVANIZED STEEL TO ASTM A153.



BOLT & THIMBLE EYELETS

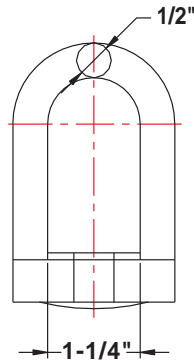


FIG. 1

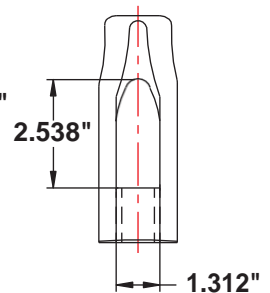
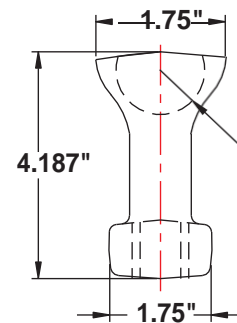
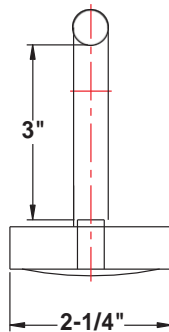


FIG. 2

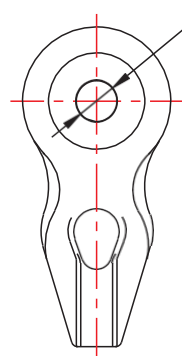
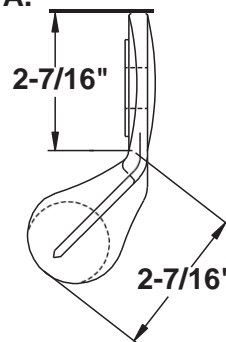


FIG. 3



CATALOG NUMBER	FIG. NO.	BOLT DIAMETER	MAXIMUM STRAND SIZE	SLOT SIZE	APPROX. WEIGHT PER 100
U1126	1	5/8"	—	11/16" X 1 1/8"	95 LBS.
U1127	1	3/4"	—	13/16" X 1 1/8"	93 LBS.
U6550C	2	5/8"	5/8"	11/16" X 1"	120 LBS.
U6551	2	3/4"	5/8"	13/16" X 1 1/8"	118 LBS.
U6500	3	5/8"	1/2"	—	123 LBS.

THE ABOVE BOLT EYES ARE USED IN A VARIETY OF GUYING APPLICATIONS, AS WELL AS DEADENDING. THE SLOTTED HOLE OFFERS THE INSTALLER THE ABILITY TO INSERT THE BOLT FROM THE EYE SIDE. THE THIMBLE EYELETS ARE USED FOR STRAIGHTAWAY GUYS, WHEREAS THE ANGLE EYELET IS USED FOR DOWN GUYS. ALL EYELETS ARE EQUAL OR GREATER IN STRENGTH TO THE BOLTS USED WITH THEM. MATERIAL IS HIGH TENSION DUCTILE IRON GALVANIZED TO ASTM A153.



OVAL & THIMBLE EYE NUTS

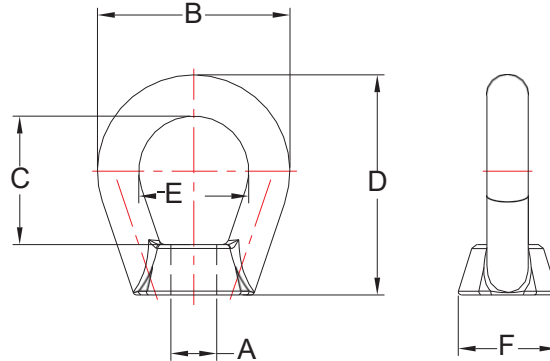


FIG. 1

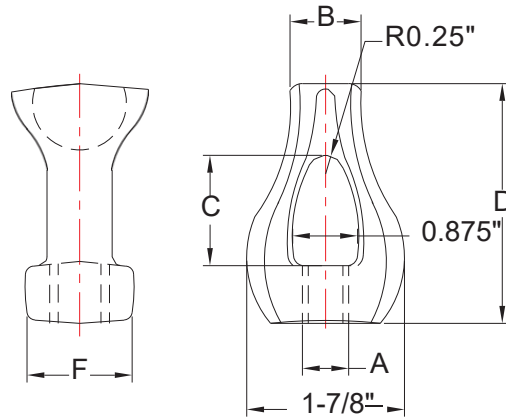


FIG. 2

CATALOG NUMBER	FIG. NO.	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"	DIM. "F"	WEIGHT PER 100
U1092	1	5/8"	2 5/8"	1 3/4"	3"	1 1/2"	1 3/8"	62 LBS.
U1093	1	3/4"	2 5/8"	1 3/4"	3"	1 1/2"	1 3/8"	60 LBS.
UEN78	1	7/8"	3 1/2"	2 5/8"	4 5/16"	1 7/8"	1 7/8"	148 LBS.
U6510	2	5/8"	1 1/8"	1 3/8"	3"	—	1 1/2"	103 LBS.
U6511	2	3/4"	1 1/2"	1 3/8"	3"	—	1 1/2"	103 LBS.

THE ABOVE EYE NUTS ARE OFFERED IN OVAL EYE STYLE AND THIMBLE EYE STYLE.
THE MATERIAL IS DUCTILE IRON TO ASTM A536 GRADE 65-45-12. HOT DIPPED GALVANIZED TO ASTM A153.



TWINE & TRIPLE EYE NUT



FIG. 1

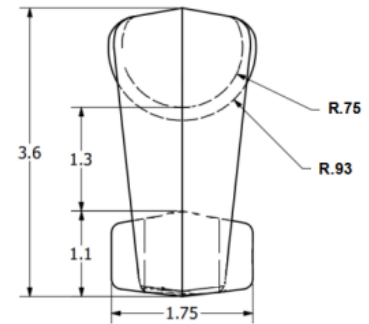
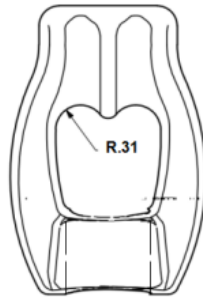
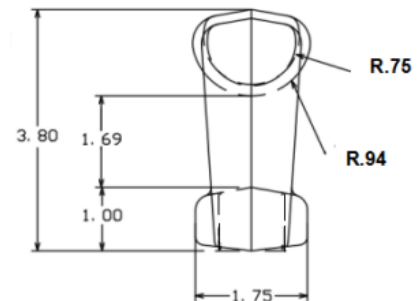
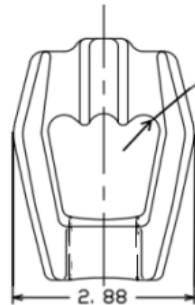


FIG. 2



CATALOGUE NUMBER	FIG NUMBER	RATING(LBS)	THREAD	APPLICATION
U6515	1	12,400	.646-11UNS-2B	5/8" BOLT
U6516	1	18,350	.771-10UNS-2B	3/4" BOLT
U6562A	1	36,000	1.021-8UNS-2B	3/4" PISA ROD/1" PISA ROD/1" BOLT
U6562H	1	50,000	1.021-8UNS-2B	3/4" PISA ROD/1" PISA ROD
U6560	1	16,000	.695-11UNS-2B	5/8" PISA ROD
U12585	2	36,000	1.021-8UNS-2B	3/4" PISA ROD/1" PISA ROD/1" BOLT
U12585H	2	50,000	1.021-8UNS-2B	3/4" PISA ROD/1" PISA ROD/1" BOLT

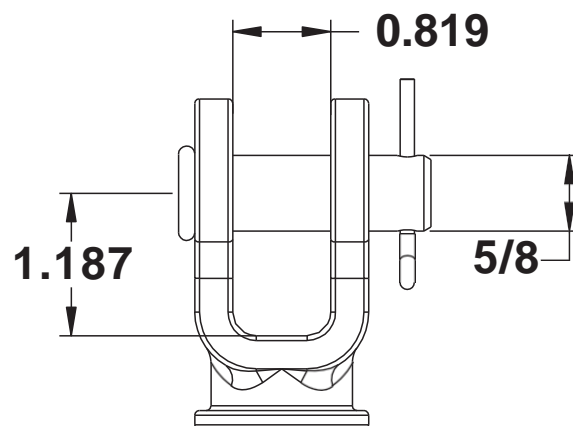
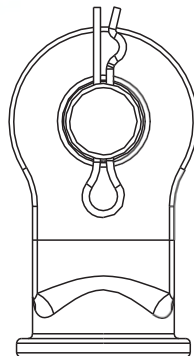
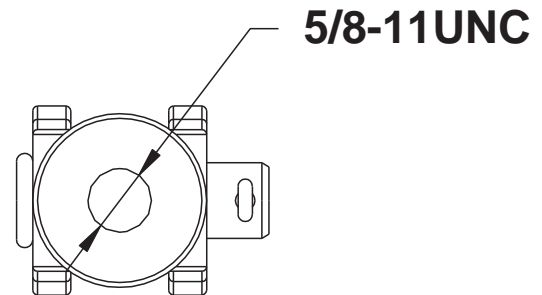
MATERIAL:FORGED STEEL.FINISH HOT DIP GALVANIZED PER ASTM A 153



CLEVIS EYENUTS

Material

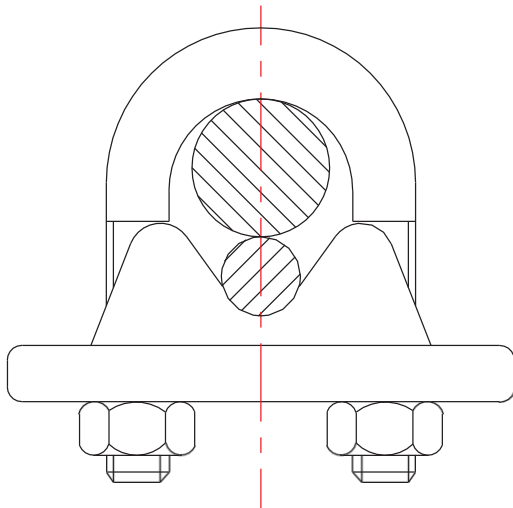
Ductile iron hot dip galvanized



Clevis Eyenuit			
Catalog Number	Bolt Dia. Tap Size	Pin Dia.	Weight /100(lbs)
UCN-5	5/8	5/8	100



DUCTILE IRON GUY CLIPS



CATALOG NUMBER	STRAND SIZE INCHES	APPROX. WEIGHT PER 100
U1048	1/4	14 LBS.
U1050	3/8	30 LBS.
U1051	1/2	48 LBS.
U1052	5/8	60 LBS.
U1053	3/4	83 LBS.
U1054	7/8	140 LBS.

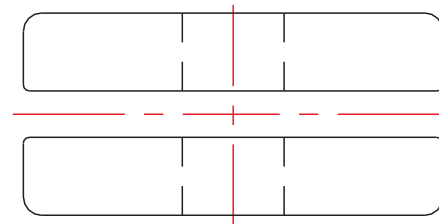
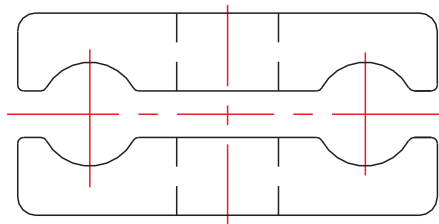
THE ABOVE MALLEABLE GUY CLIPS PROVIDE A STRONG AND ECONOMICAL MEANS OF SECURING WIRE ROPE AND DOWN GUYS.

MATERIAL : BASE-DUCTILE IRON
U BOLT-STEEL

BOTH PARTS ARE HOT DIPPED GALVANIZED TO ASTM A 153



GROUNDING CLAMPS



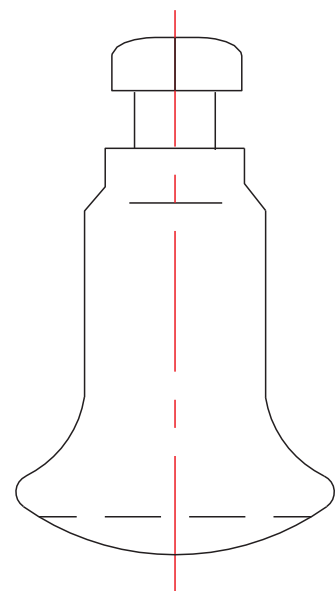
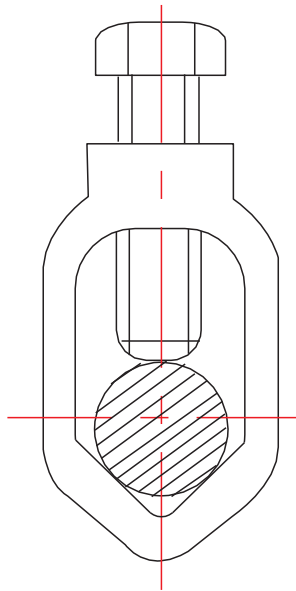
CATALOG NUMBER	MOUNTING BOLT SIZE	GROUND WIRE RANGE	APPROX. WEIGHT PER 100
U1163	5/8"	3/16" TO 7/16"	56 LBS.
U1164	3/4"	5/16" TO 1/2"	58 LBS.

THE ABOVE GROUNDING CLAMPS ARE USED TO ATTACH STATIC WIRE TO SHIELD WIRE SUPPORTS OR BOLTS ON TRANSMISSION LINES. THEY CONSIST OF TWO 1 1/2" LONG CLAMP SECTIONS AND ONE SQUARE NUT. SQUARE NUT NOT PICTURED, BUT INCLUDED.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



BRONZE GROUND ROD CLAMPS

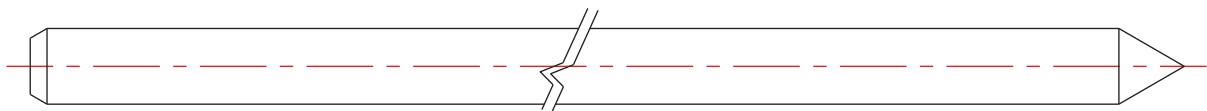


CATALOG NUMBER	ROD DIAMETER	WIRE RANGE	STANDARD PACKAGE	WEIGHT PER 100
GC58R	5/8"	8 SOL.– 2STR.	100	10 LBS.
GC58HD	5/8"	8 SOL.– 1/0 STR.	100	14 LBS.
GC34	3/4"	8 SOL.– 2 STR.	50	11 LBS.
GC34HD	3/4"	8 SOL.– 1/0 STR.	50	16 LBS.

THE ABOVE GROUND ROD CLAMPS ARE MADE OF ELECTRICAL BRONZE.
THESE CLAMPS PROVIDE A HIGH PRESSURE CONTACT BETWEEN THE ROD AND THE COPPER GROUND WIRE.
THEY ARE FURNISHED WITH HEX HEAD BOLTS.



GALVANIZED GROUND RODS



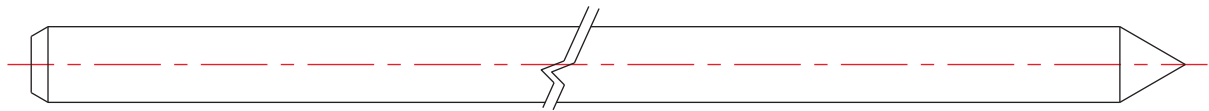
CATALOG NUMBER	ROD DIMENSION	APPROX. WEIGHT PER 100
U5328	5/8" X 8'	800 LBS.
U5330	5/8" X 10'	980 LBS.
U5338	3/4" X 8'	1160 LBS.
U5340	3/4" X 10'	1460 LBS.

THE ABOVE GALVANIZED GROUND RODS ARE FURNISHED WITH A CONE SHAPED POINT FOR EASY DRIVING. THESE STEEL RODS PROVIDE THE CUSTOMER WITH AN ECONOMICAL MEANS OF GROUNDING.

THE MATERIAL IS HOT DIPPED GALVANIZED TO ASTM A153.



COPPER GROUND RODS

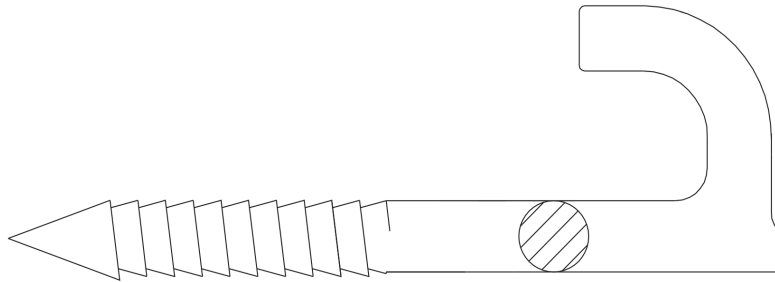


CATALOG NUMBER	ROD DIMENSION	APPROX. WEIGHT PER 100
U8338	5/8" X 8' PLAIN END 10 MIL	705 LBS.
U8338- 13	5/8" X 8' PLAIN END 13 MIL	705 LBS.
U8340	5/8" X 10' PLAIN END 10 MIL	880 LBS.
U8340- 13	5/8" X 10' PLAIN END 13 MIL	880 LBS.
U8348	3/4" X 8' PLAIN END 10 MIL	1035 LBS.
U9158	5/8" X 8' SECTIONAL 10 MIL	705 LBS.
U9158- 13	5/8" X 8' SECTIONAL 13 MIL	705 LBS.
U9160	5/8" X 10' PLAIN END 10 MIL	880 LBS.
U9160- 13	5/8" X 10' SECTIONAL 13 MIL	880 LBS.
U8350	3/4" X 10' PLAIN END 10 MIL	1290 LBS.

THE ABOVE COPPER GROUND RODS ARE FURNISHED WITH A CONE SHAPED POINT FOR EASY DRIVING. THE SECTIONAL RODS ARE THREADED AT EACH END AND CAN BE CONNECTED WITH COUPLINGS.



DRIVE HOOKS



CATALOG NUMBER	HOOK SIZE	THREAD TYPE	APPROX. WEIGHT PER 100
U3316P	7/16" X 4 3/4"	FETTER DRIVE	25 LBS.
U3318	5/16" X 3 1/2"	FETTER DRIVE	11 LBS.

THE ABOVE HOOKS HAVE A PILOT POINT AND ROLLED FETTER THREADS FOR EASY DRIVING. THESE HOOKS ARE USED FOR VARIOUS APPLICATIONS, THE MOST WIDELY OF WHICH IS DROP WIRE SUPPORT.

MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153



GUY HOOKS & STRAIN PLATES

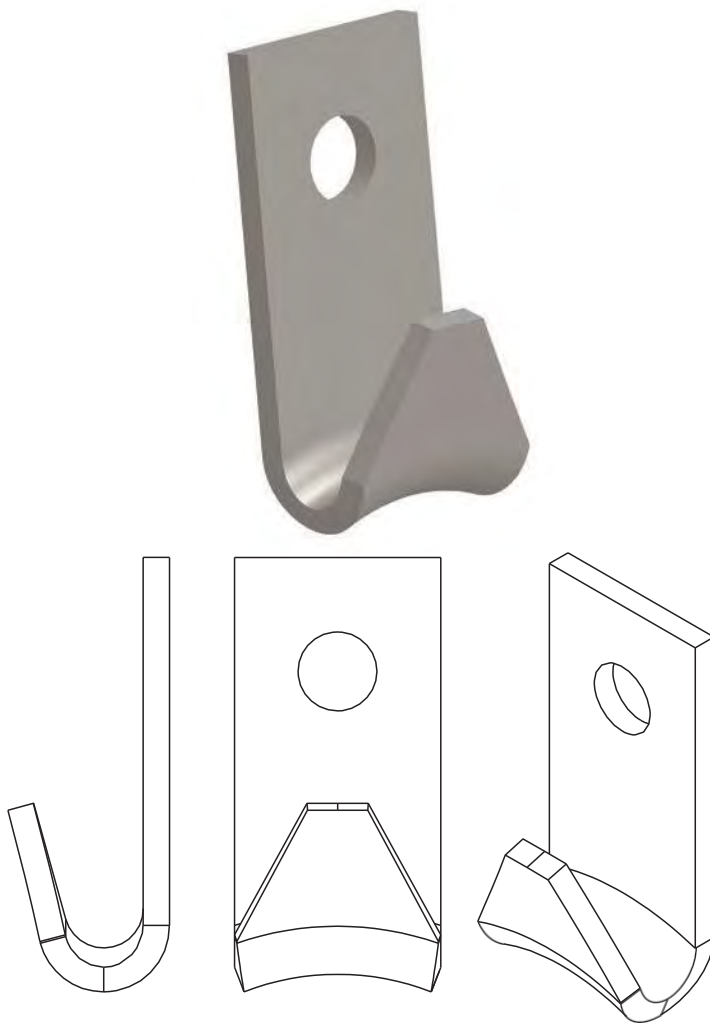


FIG. 1

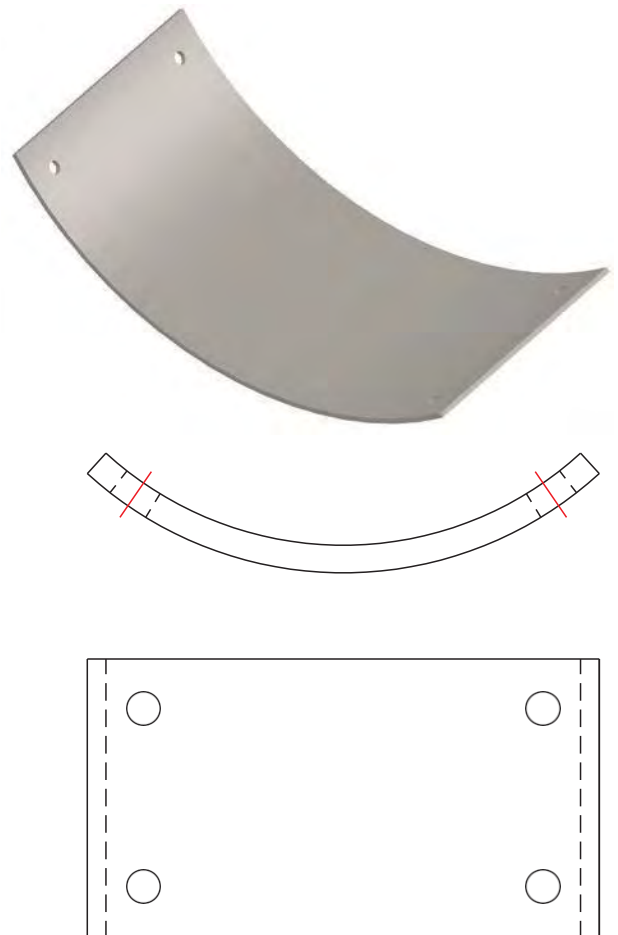


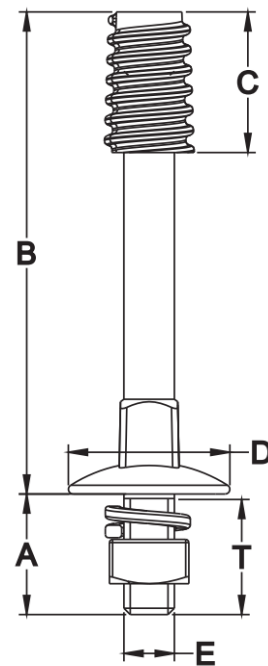
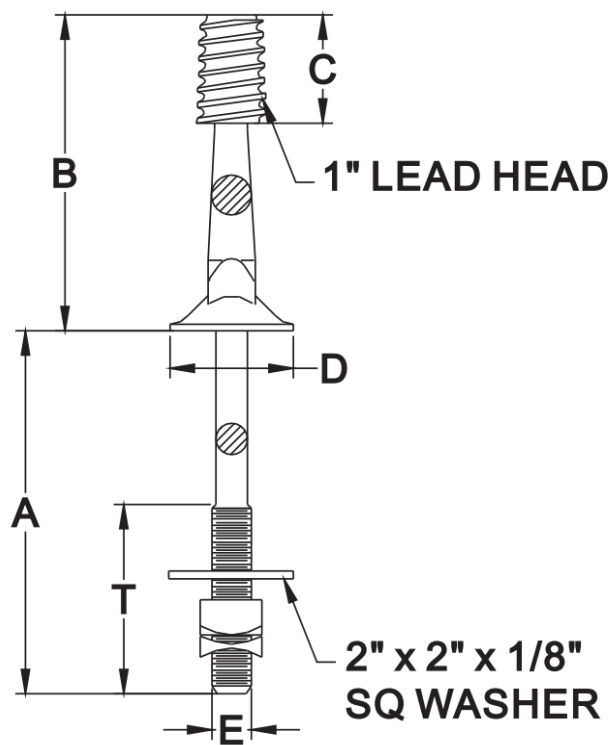
FIG. 2

CATALOG NUMBER	FIGURE NUMBER	DIMENSIONS LENGTH X WIDTH X THICKNESS	MOUNTING HOLE DIAMETER	APPROX. WEIGHT PER 100
U1019	1	4" X 1 3/4" X 1/4"	11/16"	73 LBS.
U1034	2	8" X 4" X 3/38"	3/16"	52 LBS.

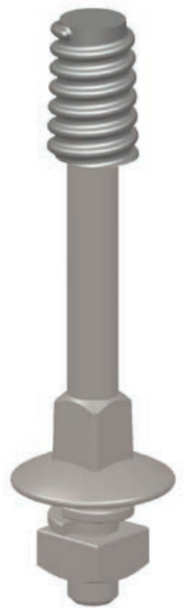
THE ABOVE GUY HOOKS ARE USED WITH THE STRAIN PLATES TO PROVIDE PROTECTION TO THE FIBERS OF A WOOD POLE. THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



LOW VOLTAGE INSULATOR PINS



SHORT SHANK



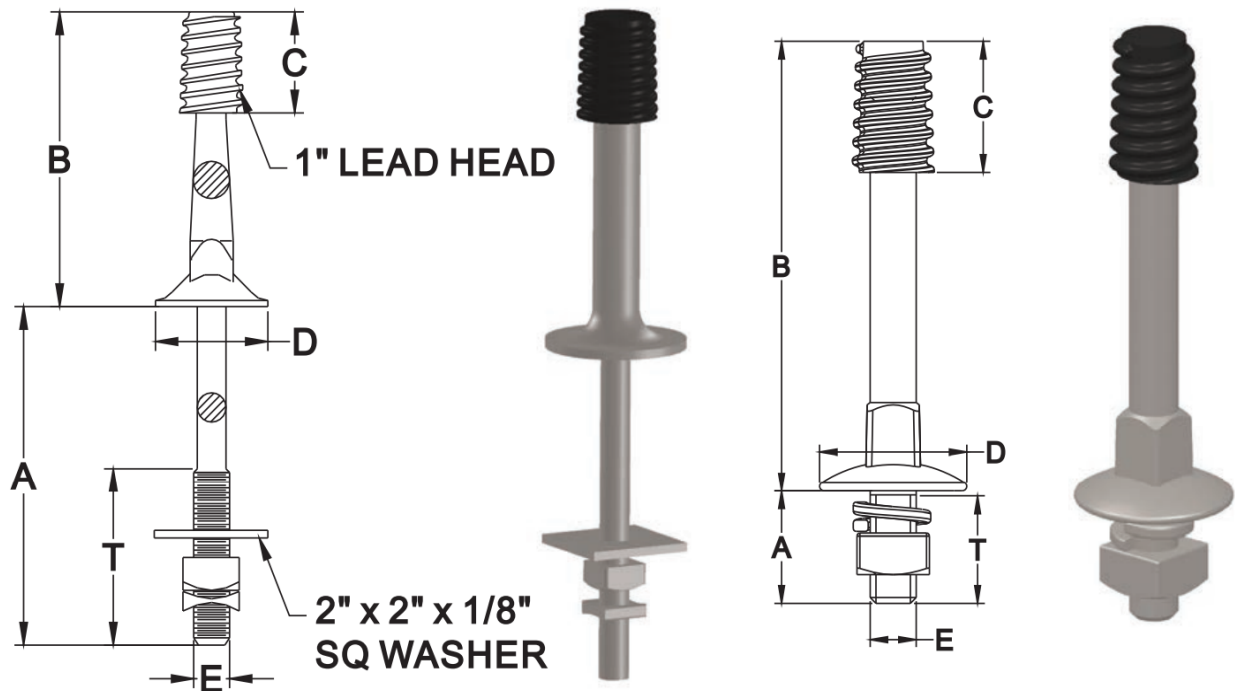
CATALOG NUMBER	CROSSARM TYPE	DIM. A	DIM. B	DIM. C	DIM. T	DIA. D	DIA. E	WT. PER 100
U203	WOOD	5 3/4"	5"	1 3/4"	4"	2"	5/8"	188 LBS.
U204	WOOD	6 1/2"	5"	1 3/4"	4"	2"	5/8"	188 LBS.
U206	WOOD	5 3/4"	6"	1 3/4"	2 3/4"	2"	5/8"	188 LBS.
U207	WOOD	6 1/2"	6"	1 3/4"	3"	2"	5/8"	194 LBS.
U209	WOOD	6 1/2"	8"	1 3/4"	4"	2 1/2"	5/8"	210 LBS.
U211	WOOD	6 1/2"	6"	1 3/4"	3 1/4"	2 1/2"	3/4"	280 LBS.
U221	STEEL SHORT SHANK	1 1/2"	5"	1 3/4"	1 3/8"	2"	5/8"	128 LBS.
U222	STEEL SHORT SHANK	1 1/2"	6"	1 3/4"	1 1/4"	2"	5/8"	150 LBS.
U224	STEEL SHORT SHANK	1 3/4"	6"	1 3/4"	1 5/8"	2 1/2"	3/4"	185 LBS.

THE ABOVE INSULATOR PINS ARE FOR USE ON LOW VOLTAGE INSULATORS HAVING ANSI 1" DIA. PIN HOLES. DEPENDING ON THEIR LENGTH, THESE PINS CAN BE USED FOR MOUNTING ON WOOD OR STEEL CROSSARMS.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



LOW VOLTAGE INSULATOR NYLON PINS



SHORT SHANK

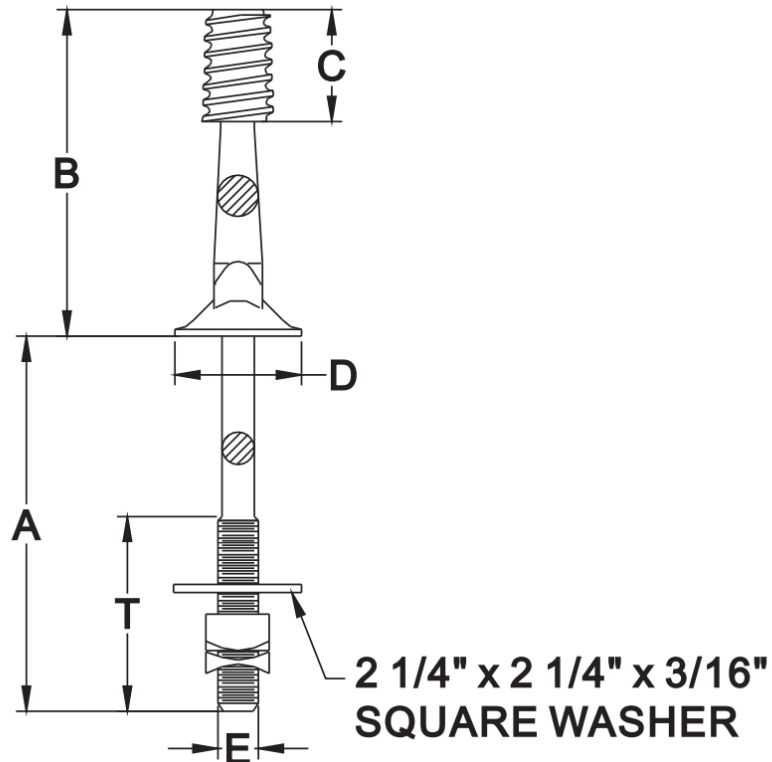
CATALOG NUMBER	CROSSARM TYPE	DIM. A	DIM. B	DIM. C	DIM. T	DIA. D	DIA. E	WT. PER 100
U203Z	WOOD	5 3/4"	5"	1 3/4"	4"	2"	5/8"	148 LBS.
U204Z	WOOD	6 1/2"	5"	1 3/4"	4"	2"	5/8"	158 LBS.
U206Z	WOOD	5 3/4"	6"	1 3/4"	2 3/4"	2"	5/8"	188 LBS.
U207Z	WOOD	6 1/2"	6"	1 3/4"	3"	2"	5/8"	194 LBS.
U209Z	WOOD	6 1/2"	8"	1 3/4"	4"	2 1/2"	5/8"	210 LBS.
U211Z	WOOD	6 1/2"	6"	1 3/4"	3 1/4"	2 1/2"	3/4"	280 LBS.
U221Z	STEEL SHORT SHANK	1 1/2"	5"	1 3/4"	1 3/8"	2"	5/8"	128 LBS.
U222Z	STEEL SHORT SHANK	1 1/2"	6"	1 3/4"	1 3/8"	2"	5/8"	130 LBS.
U224Z	STEEL SHORT SHANK	1 3/4"	6"	1 3/4"	1 5/8"	2 1/2"	3/4"	160 LBS.
U24365Z	STEEL SHORT SHANK	2 1/2"	7"	1 3/4"	2 3/8"	2 1/2"	3/4"	179 LBS.

THE ABOVE INSULATOR PINS ARE FOR USE ON LOW VOLTAGE INSULATORS HAVING ANSI 1" DIA. PIN HOLES. DEPENDING ON THEIR LENGTH, THESE PINS CAN BE USED FOR MOUNTING ON WOOD OR STEEL CROSSARMS.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



HIGH VOLTAGE INSULATOR PINS



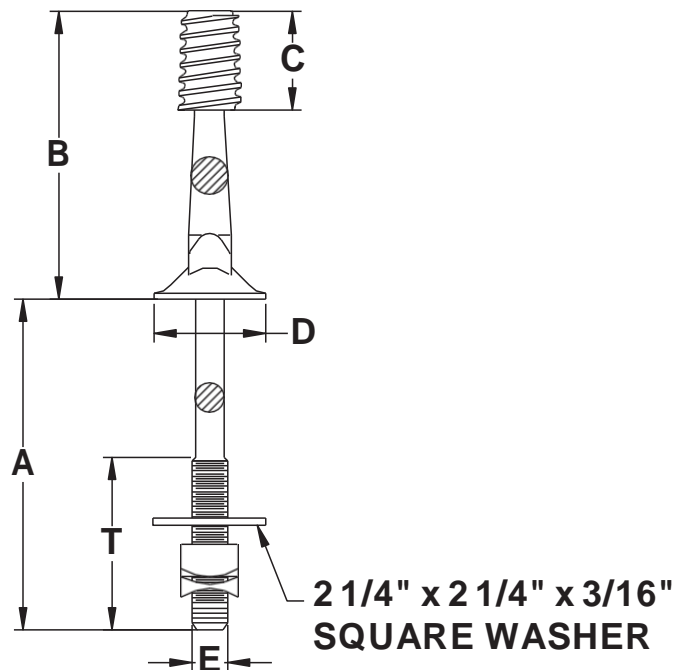
CATALOG NUMBER	DIAMETER OF PIN	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "T"	DIA. "D"	DIA. "E"	WT. PER 100
U626	1"	6 1/2"	6"	1.75"	3 1/2"	2 3/4"	5/8"	245 LBS.
U607	1"	6 1/2"	7"	1.75"	3 1/2"	2 3/4"	3/4"	290 LBS.
U647	1 3/8"	7"	7"	2.13"	3 1/2"	3"	5/8"	346 LBS.
U608	1 3/8"	7"	8"	2.13"	3 1/2"	3"	3/4"	426 LBS.
U610	1 3/8"	10"	7"	2.13"	3 1/2"	3"	3/4"	460 LBS.

THE ABOVE INSULATOR PINS ARE FOR USE ON HIGH VOLTAGE INSULATORS HAVING ANSI 1" OR 1 3/8" PIN HOLE DIAMETERS. THE PINS ARE A ONE PIECE FORGED DESIGN WITH CAST LEAD THREADS. OTHER SIZES ARE AVAILABLE UPON REQUEST. MINIMUM QUANTITIES MAY APPLY.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



HIGH VOLTAGE INSULATOR NYLON PINS



CATALOG NUMBER	DIAMETER OF PIN	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "T"	DIA. "D"	DIA. "E"	WT. PER 100
U626Z	1"	6 1/2"	6"	1.75"	3 1/2"	2 3/4"	5/8"	194 LBS.
U607Z	1"	6 1/2"	7"	1.75"	3 1/2"	2 3/4"	3/4"	282 LBS.
U647Z	1 3/8"	7"	7"	2.13"	3 1/2"	3"	5/8"	302 LBS.
U608Z	1 3/8"	7"	8"	2.13"	3 1/2"	3"	3/4"	482 LBS.
U610Z	1 3/8"	10"	7"	2.13"	3 1/2"	3"	3/4"	515 LBS.

THE ABOVE INSULATOR PINS ARE FOR USE ON HIGH VOLTAGE INSULATORS HAVING ANSI 1" OR 1 3/8" PIN HOLE DIAMETERS. THE PINS ARE A ONE PIECE FORGED DESIGN WITH CAST LEAD THREADS. OTHER SIZES ARE AVAILABLE UPON REQUEST. MINIMUM QUANTITIES MAY APPLY.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



POLE TOP PINS



Material

Pin Body: Steel hot dip galvanized

Threads: Lead

FIG. 1

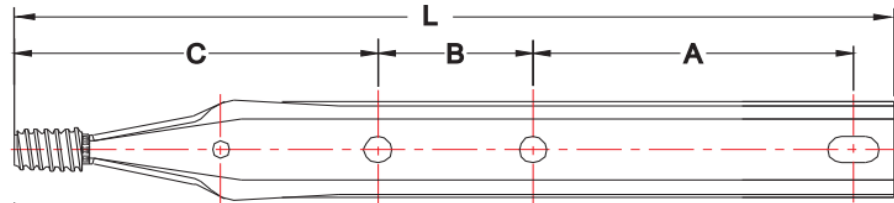
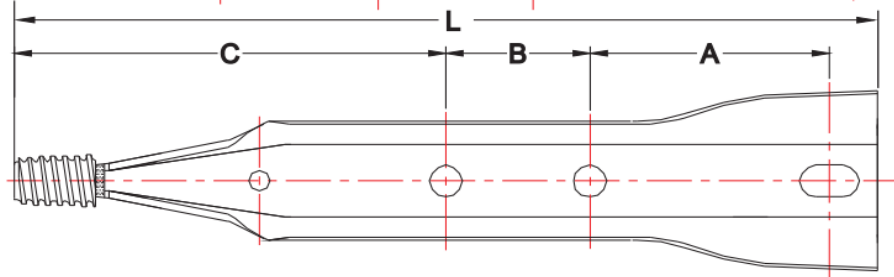


FIG. 2



CATALOG NUMBER	FIG. NO.	OVERALL LENGTH L	DIMENSION A	DIMENSION B	DIMENSION C	LEAD THREAD DIAMETER	WEIGHT PER 100
U715	1	15"	5"	2 HOLE ONLY	9"	1"	215 LBS.
U1368	1	18"	5"	3"	9"	1"	354 LBS.
U1220	1	20"	5"	3"	11"	1"	396 LBS.
U740	1	20"	8"	2 HOLE ONLY	11"	1"	355 LBS.
U744	1	24"	5"	3"	15"	1"	487 LBS.
U29645	1	24"	6"	2"	15"	1"	487 LBS.
U720	1	20 1/4"	8"	2 HOLE ONLY	11 1/4"	1 3/8"	398 LBS.
U2008	2	18"	5"	3"	9"	1"	272 LBS.
U2011	2	24"	8"	2 HOLE ONLY	15"	1 3/8"	492 LBS.

THE ABOVE POLE TOP PINS ARE MADE OF PRESSED STEEL AND CAN BE MOUNTED TO A POLE BY A 5/8" BOLT. EACH PIN STYLE OFFERED HAS LEAD INSULATOR THREADS.

THE BOTTOM BOLT HOLE "S" IS SLOTTED 11/16" X 1 1/4" ON BOTH FIGURES SHOWN ABOVE.

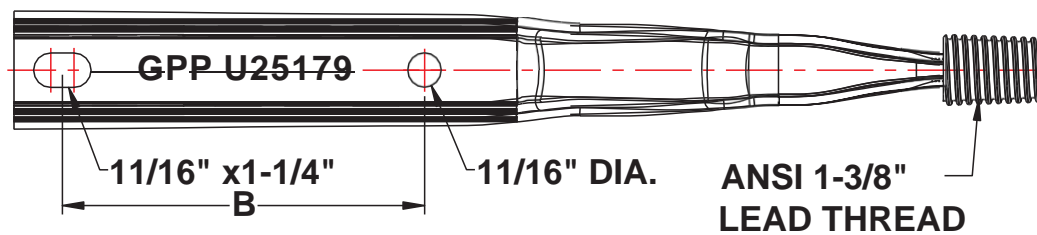
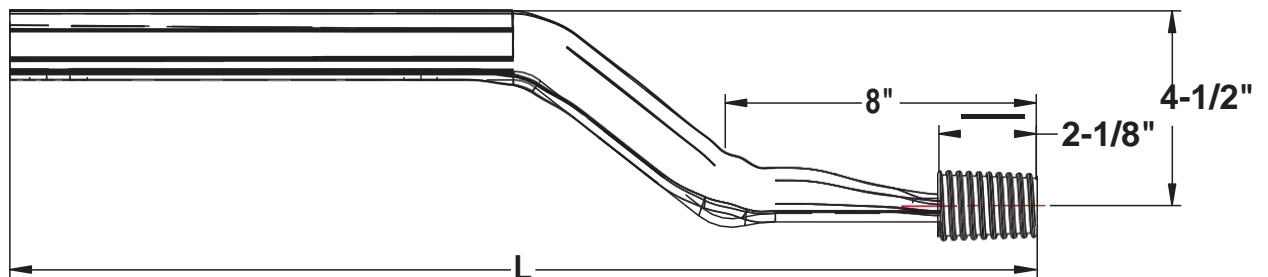
FOR NYLON ALLOY THREADS ADD THE SUFFIX "Z" TO THE CATALOG NUMBER. (EXAMPLE: U720Z)

THE MATERIAL IS HOT DIPPED GALVANIZED TO ASTM A153.

ADD SUFFIX "Z" FOR NYLON THREAD.



OFFSET POLE TOP PINS

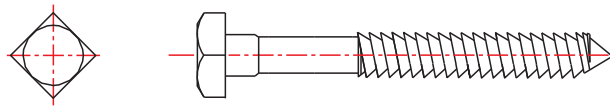


CATALOG NUMBER	LENGTH "L"(INCHES)	HOLE SPACING "B"(INCHES)	LEAD THREAD (INCHES)	WEIGHT PER 100 LBS
U25179	22.4"	8"	1-3/8"	600
U25179-1	22.4"	8"	1"	600



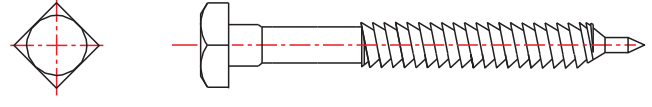
LAG SCREWS

FIG. 1



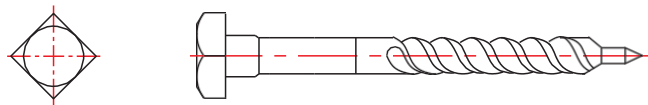
FETTER DRIVE REGULAR POINT

FIG. 2



FETTER DRIVE PILOT POINT

FIG. 3



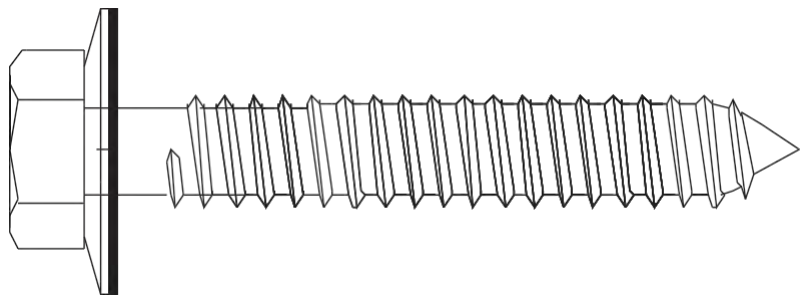
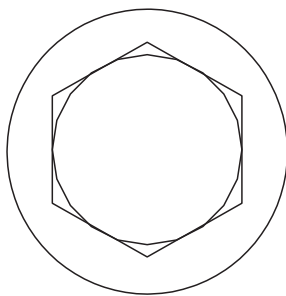
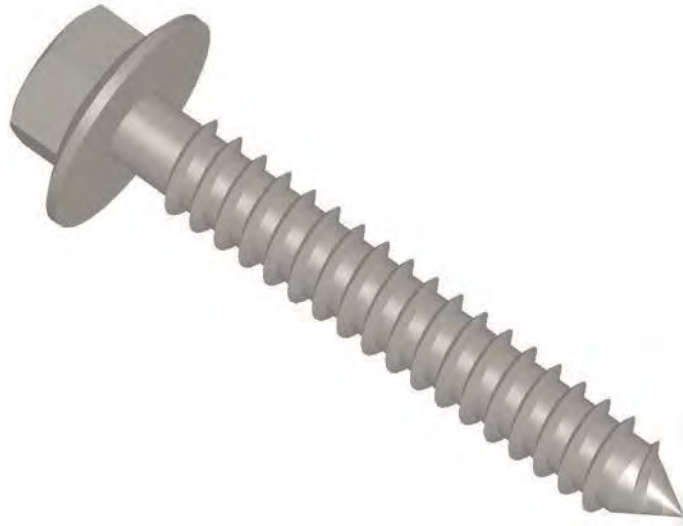
TWIST DRIVE

CATALOG NUMBER	FIGURE NUMBER	DIMENSION	MINIMUM THREAD LENGTH	APPROX. WEIGHT PER 100
U8652	1	1/4" X 2"	1 1/2"	2.7 LBS.
U8652- 1/2	1	1/4" X 2 1/2"	1 3/4"	3.3 LBS.
U8741	1	5/16" X 3"	1 7/8"	7.0 LBS.
U8742- 1/2	1	3/8" X 2 1/2"	1 3/4"	8.8 LBS.
U8743	1	3/8" X 3"	2"	9.9 LBS.
U8754	1	1/2" X 4"	2 1/2"	23 LBS.
U8743P	2	3/8" X 3"	2"	9.9 LBS.
U8744P	2	3/8" X 4"	2 1/4"	13 LBS.
U8753- 1/2P	2	1/2" X 3 1/2"	2 1/4"	20 LBS.
U8754P	2	1/2" X 4"	2 1/2"	23 LBS.
U8754- 1/2P	2	1/2" X 4 1/2"	2 3/4"	26.2 LBS.
U8756P	2	1/2" X 6"	3"	30
U8754TP	3	1/2" X 4"	2 1/2"	26 LBS.
U8754- 1/2TP	3	1/2" X 4 1/2"	2 5/8"	37 LBS.

THE ABOVE LAG SCREWS ARE OFFERED IN A VARIETY OF STYLES. EACH HAVE ROLLED THREADS AND CAN BE EITHER WRENCHED IN OR DRIVEN IN WITHOUT INTERFERING WITH ITS' HOLDING STRENGTH. THE MATERIAL IS HOT DIPPED GALVANIZED TO ASTM A153.



RISER SHIELD LAG SCREWS



CATALOG NUMBER	SCREW DIMENSION	APPROX. WEIGHT PER 100
RSS142	1/4" X 2"	14 LBS.

THE ABOVE LAG SCREWS ARE PRIMARILY USED TO ATTACH RISER SHIELD OR U GUARD TO A WOOD POLE . THIS HEX HEAD SCREW IS FURNISHED WITH A NEOPRENE WASHER AND A GIMLET POINT TO ENABLE THE INSTALLER TO EASILY PENETRATE THE WOOD POLE .

THE MATERIAL IS HOT DIPPED GALVANIZED TO ASTM A153.



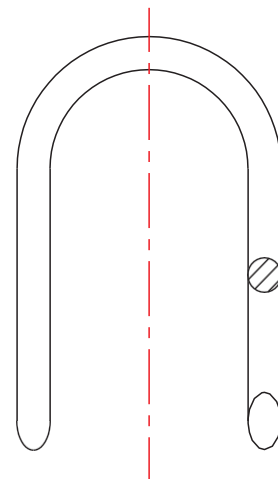
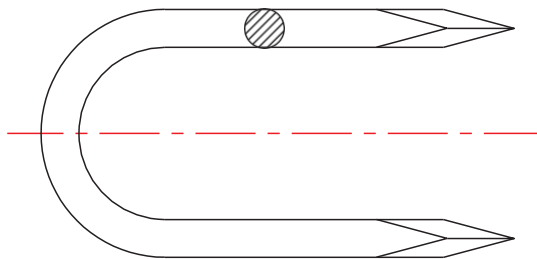
STAPLES



DIAMOND POINT



CUT POINT

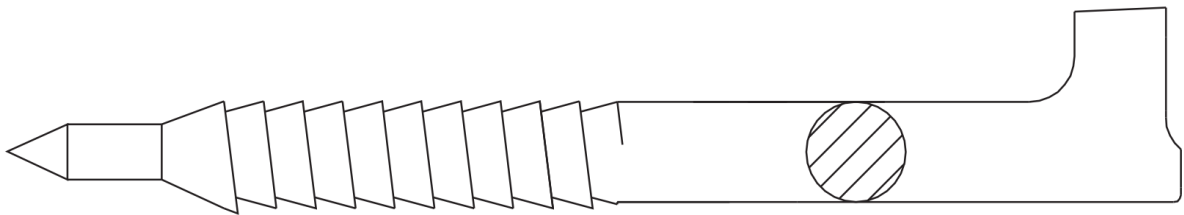


CATALOG NUMBER	STAPLE TYPE	DIMENSIONS LENGTH X INSIDE WIDTH X WIRE DIAMETER	APPROX. WEIGHT PER 100 STAPLES	STANDARD PACKAGE QUANTITY
U172	DIAMOND	1 1/2" X 3/8" X .148"	1.54 LBS.	5000
U172A	DIAMOND	1 3/4" X 3/8" X .12"	1.00 LBS.	5000
U156	DIAMOND	2" X 1/2" X .162"	2.5 LBS.	1000
U128	DIAMOND	3" X 1 1/16" X 1/4"	7.90 LBS.	1000
U142	DIAMOND	3" X 1 1/2" X 1/4"	8.30 LBS.	1000
U157	CUT POINT	2" X 1/2" X .162"	2.10 LBS.	2000
U1672G	CUT POINT	1 1/2" X 1/4" X .148"	1.40 LBS.	5000

THE ABOVE STAPLES ARE PRIMARILY USED FOR GROUND WIRE AND GROUND WIRE MOLDING.
THE MATERIAL USED IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



POLE STEPS



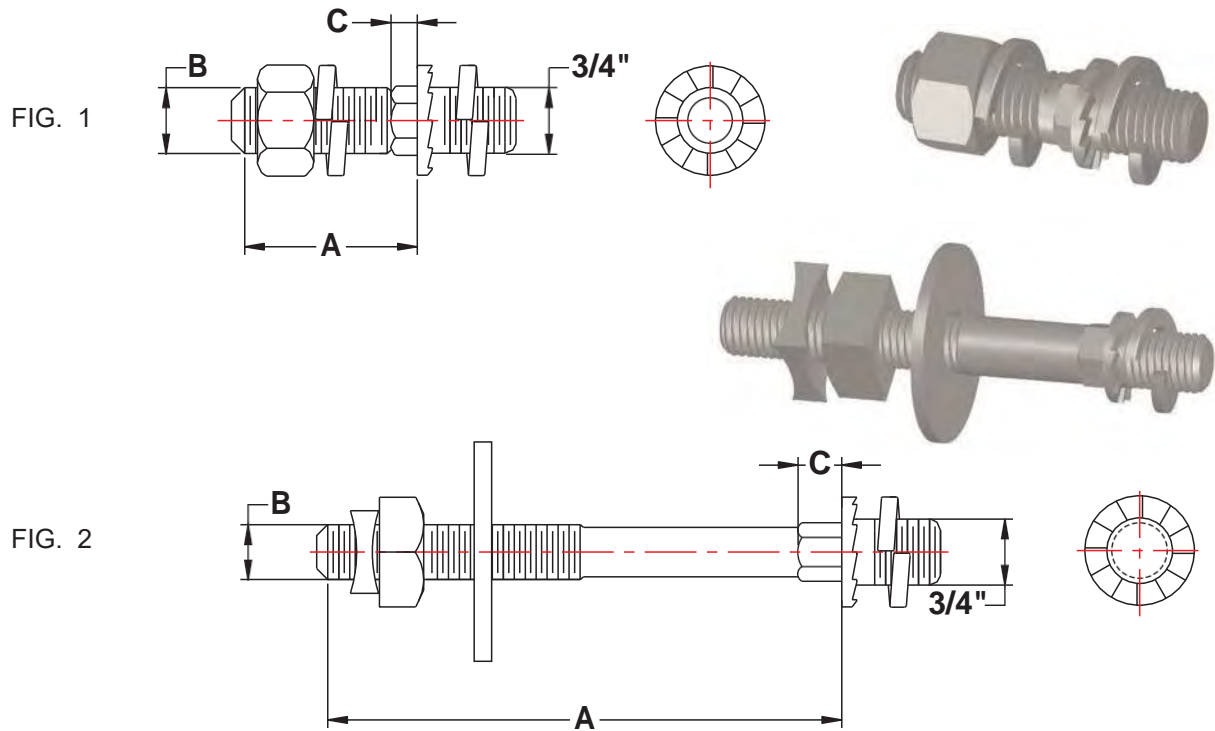
CATALOG NUMBER	SIZE	APPROX. WEIGHT PER 100
U1117	5/8" X 9"	83 LBS.
U1118	5/8" X 10"	95 LBS.

THE ABOVE POLE STEPS HAVE A FLAT HEAD AND ROLLED FETTER THREADS WHICH ALLOW THE INSTALLER TO EASILY DRIVE IT INTO THE POLE. A RING TYPE MARK ABOVE THE THREADS INDICATES THE PROPER DRIVING DEPTH.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



LINE POST INSULATOR STUDS

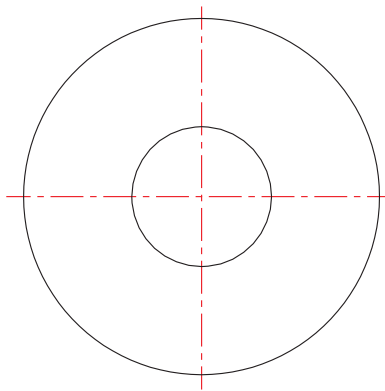


CATALOG NUMBER	FIG. NO.	CROSSARM TYPE	SHANK LENGTH "A"	SHANK DIAMETER "B"	DIMENSION COLLAR "C"	SHANK THREAD LENGTH	LINE POST RATING (KV)	APPROX. WEIGHT PER 100
LPS 5834	1	STEEL	1 3/4"	5/8"	1/4"	FULL	20 – 25	47 LBS.
LPS 3434	1	STEEL	1 13/16"	3/4"	1/4"	FULL	35 – 66	56 LBS.
LPS 3434L	1	STEEL	2 1/2"	3/4"	1/4"	FULL	35 – 66	58 LBS.
LPS 587	2	WOOD	7 9/16"	5/8"	1/2"	6"	20 – 25	120 LBS.
LPS 588	2	WOOD	8"	5/8"	1/2"	6"	20 – 25	125 LBS.
LPS 5810	2	WOOD	10"	5/8"	1/2"	6"	20 – 25	145 LBS.
LPS 5812	2	WOOD	12"	5/8"	1/2"	6"	20 – 25	190 LBS.
LPS 5814	2	WOOD	14 1/16"	5/8"	1/2"	8"	20 – 25	210 LBS.
LPS 347	2	WOOD	7 9/16"	3/4"	5/8"	4"	35 – 66	158 LBS.
LPS 349	2	WOOD	9 1/16"	3/4"	5/8"	4"	35 – 66	165 LBS.
LPS 3410	2	WOOD	10 1/16"	3/4"	5/8"	6"	35 – 66	178 LBS.
LPS 3412	2	WOOD	12 1/16"	3/4"	5/8"	6"	35 – 66	200 LBS.

THE ABOVE STUD BOLTS ARE USED TO ATTACH INSULATORS TO VARIOUS CROSSARM TYPES. THE STEEL ARM STUDS ARE FURNISHED WITH ONE REGULAR HEX NUT AND TWO SPRING LOCKWASHERS. THE WOOD ARM STUDS ARE FURNISHED WITH ONE REGULAR SQUARE NUT, ONE MF LOCKNUT, ONE FLAT SQUARE WASHER, AND ONE SPRING LOCKWASHER. THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A 153.



GALVANIZED ROUND WASHERS



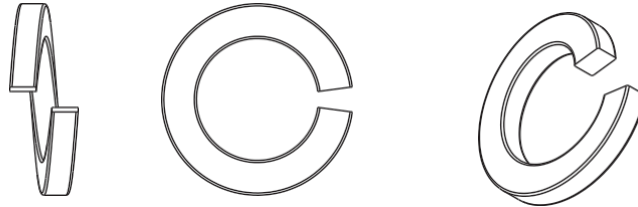
CATALOG NUMBER	OUTSIDE DIAMETER	WASHER THICKNESS	INSIDE DIAMETER	FOR BOLT DIAMETER	APPROX. WEIGHT PER 100
U1084	1"	3/32"	7/16"	3/8"	14 LBS.
U1086	1 3/8"	1/8"	9/16"	1/2"	44 LBS.
U1088	1 3/4"	1/8"	11/16"	5/8"	75 LBS.
U1089	2"	1/8"	13/16"	3/4"	91 LBS.

THE ABOVE ROUND WASHERS ARE MADE OF ROLLED STEEL HOT DIPPED GALVANIZED TO ASTM A153.

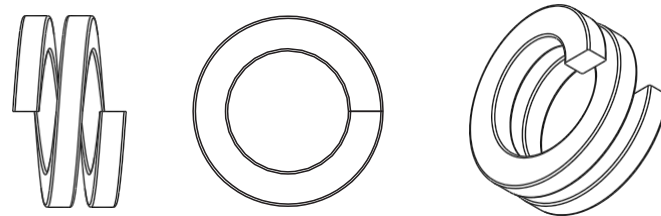


LOCK WASHERS

SINGLE COIL



DOUBLE COIL



CATALOG NUMBER	WASHER TYPE	SIZE SECTION	FOR BOLT DIAMETER	APPROX. WEIGHT PER 100
U134	SINGLE COIL	.141" - .094"	3/8"	.8 LBS.
U138	SINGLE COIL	.171" - .125"	1/2"	1.6 LBS.
U139	SINGLE COIL	.203" - .156"	5/8"	2.7 LBS.
U140	SINGLE COIL	.234" - .188"	3/4"	4.6 LBS.
U177	DOUBLE COIL	.203" - .156"	5/8"	4.1 LBS.
U178	DOUBLE COIL	.234" - .188"	3/4"	7.0 LBS.

THE ABOVE LOCK WASHERS ARE PRIMARILY USED TO KEEP A BOLT NUT IN TENSION UNDER ANY CONDITIONS. THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.

GALVANIZED SQUARE WASHERS

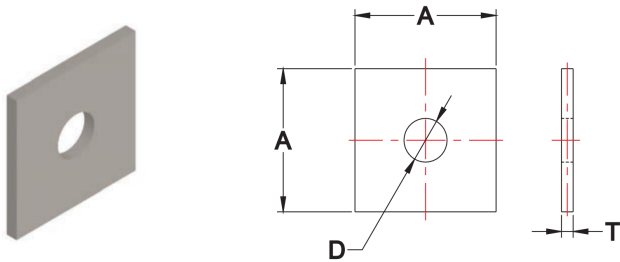


FIG.1

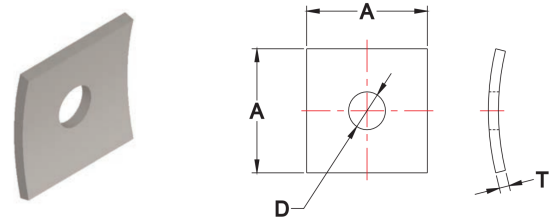


FIG.2

CATALOG NUMBER	FIGURE NUMBER	DIMENSION A	DIMENSION D	DIMENSION T	APPROX WEIGHT PER 100
U1073	1	2"	9/16"	1/8"	13 LBS.
U1074	1	2"	11/16"	1/8"	13 LBS.
U1075	1	2 1/4"	11/16"	3/16"	23 LBS.
U1076	1	2 1/4"	13/16"	3/16"	23 LBS.
U1077	1	3 1/2"	15/16"	3/8"	62 LBS.
U1078	1	2 1/2"	15/16"	1/4"	45 LBS.
U1079	1	3"	13/16"	1/4"	64 LBS.
U1079A	1	4"	11/16"	1/2"	222 LBS.
U1079B	1	4"	13/16"	1/2"	220 LBS.
U1079C	1	4"	13/16"	1/4"	110 LBS.
U1079D	1	4"	13/16"	3/16"	83 LBS.
U1080	1	4"	13/16"	3/16"	75 LBS.
U1081	1	4"	1 1/8"	1/2"	194 LBS.
U1082	1	4"	15/16"	1/4"	114 LBS.
U113	2	3"	11/16"	1/4"	57 LBS.
U133	2	3 1/4"	13/16"	1/4"	76 LBS.
U6821	2	2 1/4"	11/16"	3/16"	26 LBS.
U6822	2	2 1/2"	11/16"	3/16"	34 LBS.
U6823	2	3"	13/16"	1/4"	56 LBS.
U6824	2	3 1/2"	1 1/8"	3/8"	60 LBS.
U6825	2	3 1/4" X 3 1/8"	13/16"	1/4"	71 LBS.
U6828	2	3 1/2"	15/16"	3/8"	130 LBS.
U6829	2	4"	15/16"	1/4"	117 LBS.
U6829A	2	4"	11/16"	1/4"	117 LBS.

THE ABOVE SQUARE WASHERS ARE USED PRIMARILY ON POLES AND CROSSARMS TO DISTRIBUTE THE STRESS EVENLY OVER THE SURFACE.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



M F LOCKNUTS & REGULAR SQUARE NUTS

FIG. 1

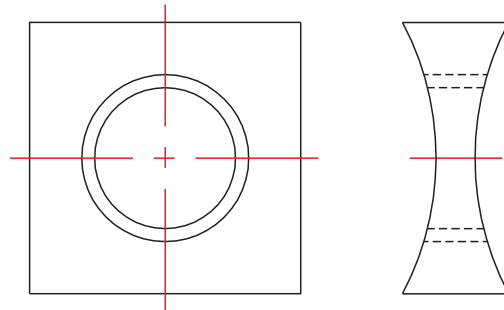
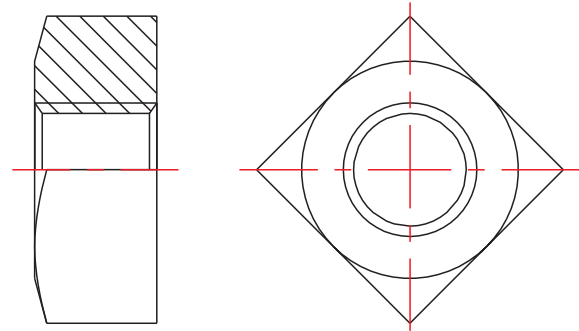
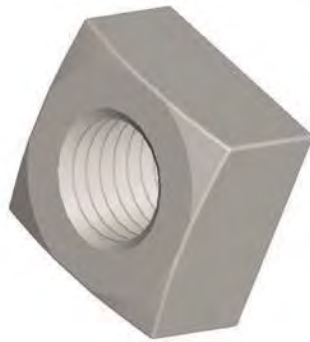


FIG. 2



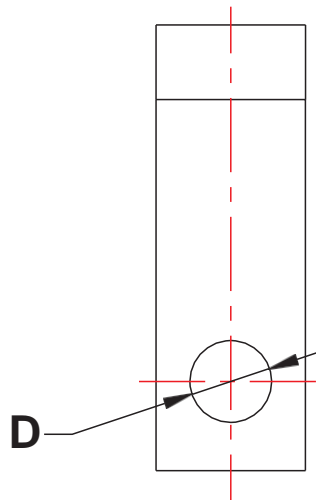
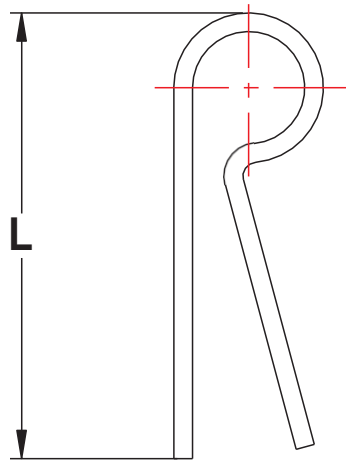
CATALOG NUMBER	FIGURE NUMBER	NOMINAL SIZE & THREADS PER INCH	APPROX. WEIGHT PER 100
U8581	1	3/8" – 16	1.3 LBS.
U8582	1	1/2" – 13	2.4 LBS.
U8583	1	5/8" – 11	4.2 LBS.
U8584	1	3/4" – 10	5.5 LBS.
U8584– 1/2	1	7/8" – 9	6.1 LBS.
U8561	2	3/8" – 16	2.2 LBS.
U8562	2	1/2" – 13	5.4 LBS.
U8563	2	5/8" – 11	10.2 LBS.
U8564	2	3/4" – 10	13.8 LBS.
U8564– 1/2	2	7/8" – 9	24.3 LBS.

THE ABOVE —MFI STYLE LOCKNUTS ARE USED TO SECURELY LOCK DOWN REGULAR NUTS.
THE SQUARE NUTS SHOWN IN FIGURE NUMBER 2 , ARE USED ON A VARIETY OF BOLT AND STUD HARDWARE.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



SPRING WASHERS



CATALOG NUMBER	FOR BOLT DIAMETER "D"	DIMENSION "L"	APPROX. WEIGHT PER 100
U3540	5/8"	3 3/4"	100 LBS.
U3541	3/4"	3 3/4"	98 LBS.

THE ABOVE SPRING WASHERS ARE PRIMARILY USED TO KEEP UNITS IN TENSION. OTHER SIZES ARE AVAILABLE UPON REQUEST. MINIMUM QUANTITIES MAY APPLY.

THE MATERIAL IS STEEL HOT DIPPED GALVANIZED TO ASTM A153.



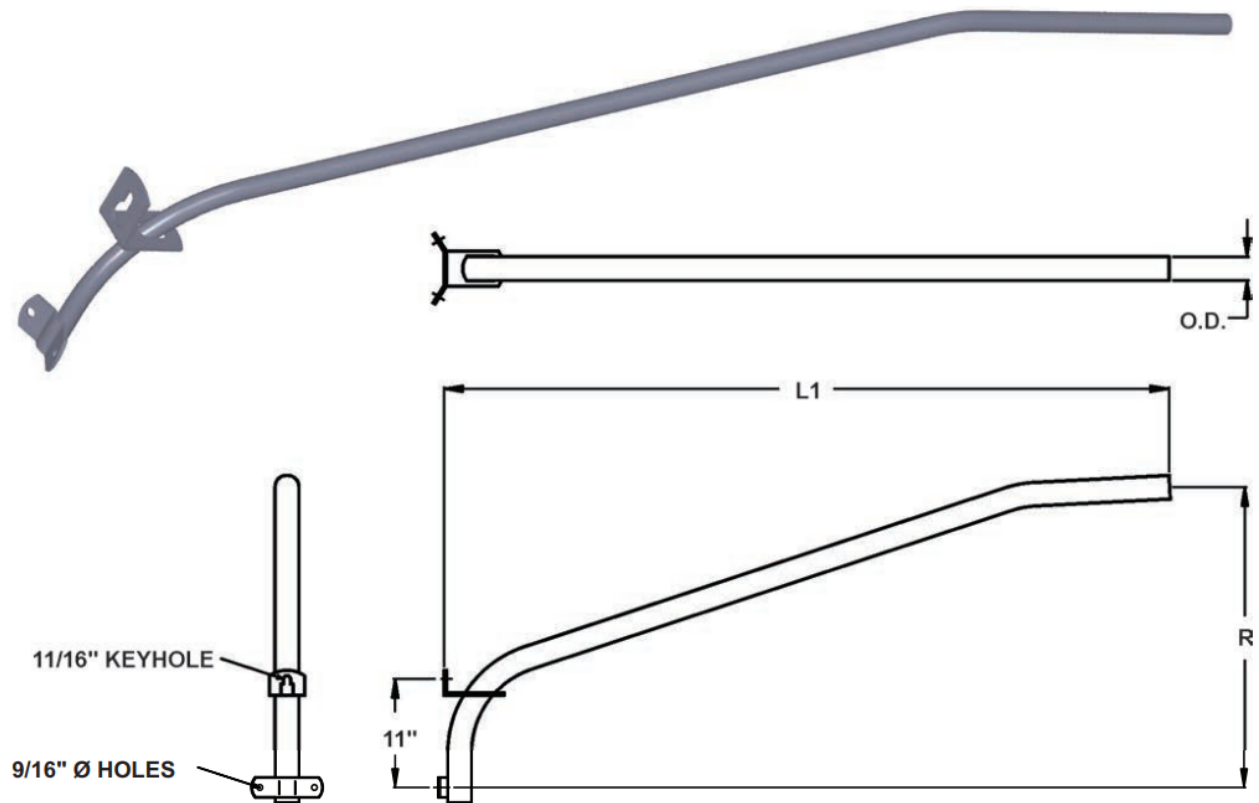
MAST ARMS, WOOD POLE MOUNTING

Features

- 3/8" grounding hardware included

Material

Steel hot dip galvanized or aluminum



Catalog Number	Material	OD (in)	L1	R	Weight Ea (lbs)
SLA-125-2	Steel	1.66	24	18	9.0
SLA-125-2.5	Steel	1.66	30	18	10.0
SLA-2-2.5	Steel	2.38	30	18	13.0
SLA-125-4	Steel	1.66	48	18	12.0
SLA-125-6	Steel	1.66	72	28	12.2
SLA-2-6	Steel	2.38	72	28	21.5
SLA-125-8	Steel	1.66	96	36	15.2
SLA-2-8	Steel	2.38	96	36	27.0
ALA-2-6	Aluminum	2.38	72	28	11.0
ALA-2-8	Aluminum	2.38	96	36	14.0

Notes:

- 1) 1.66" OD equals 1 1/4" IPS
- 2) 2.38" OD equals 2" IPS



CLAMPS

Aerial Cable, Messenger, Midspan

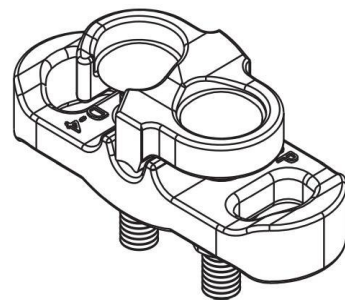
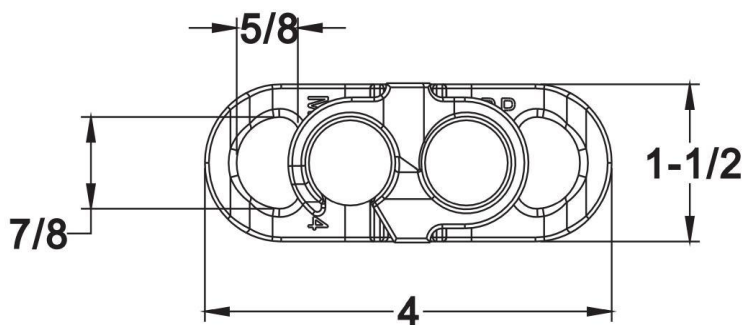
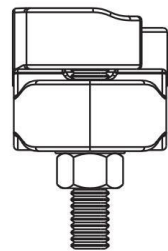
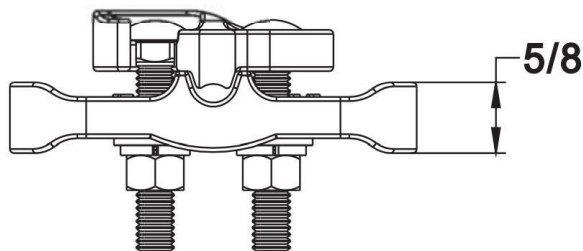
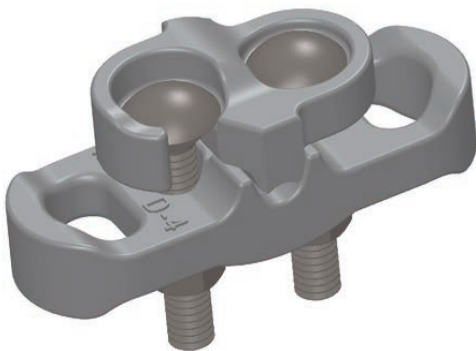
Features

- UMSD-4 has a “swing away” keeper for easy installation

Material

Body and keeper: Aluminum alloy

Hardware: Steel hot dip galvanized per ASTM A153



Catalog Number	Mounting Bolts	Cable Diameter	Weight /100(LBS)
UMSD-4	3/8	0.23 – 0.42	52



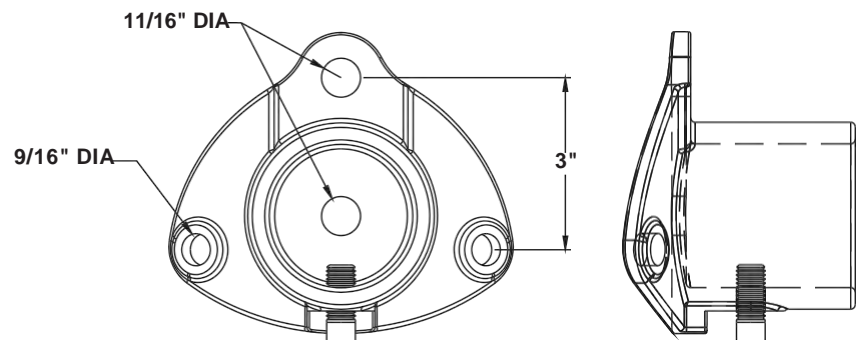
FITTINGS, GUY

Sidewalk Guy

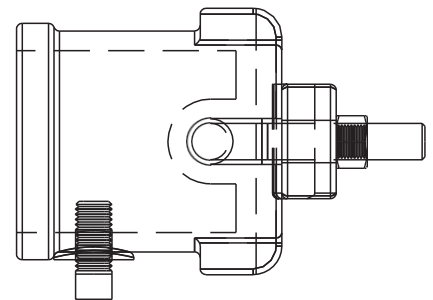
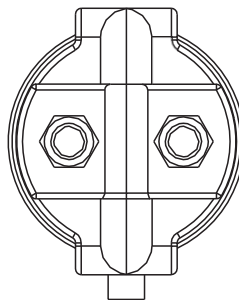
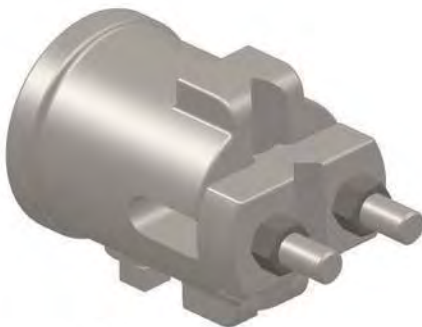
These cast iron fittings are used with standard pipe near sidewalks and buildings where there is insufficient space for standard guying and where head clearance must be maintained.

Material

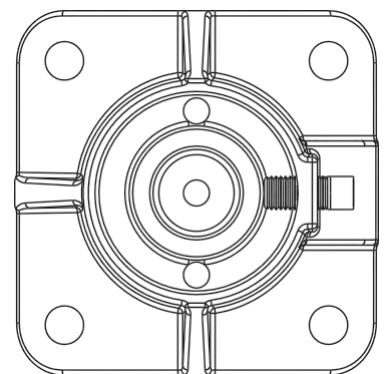
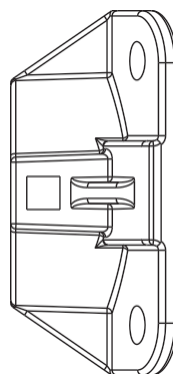
Ductile iron hot dip galvanized



U1501HD



U1502HD



U0521

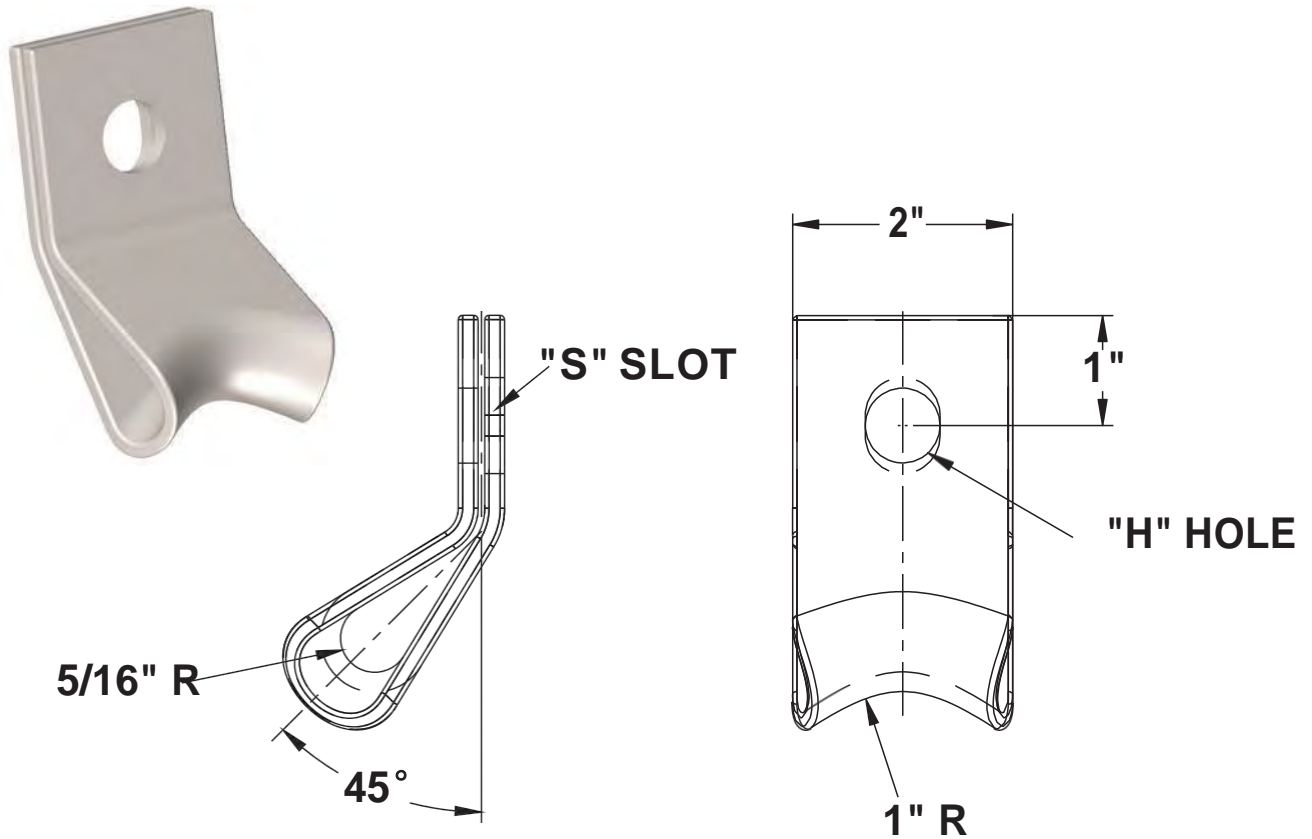
Catalog Number	Description	Wire Range	Pipe Size	Weight /100 (lbs)
U1502HD	Clamp End Fitting	1/4" to 9/16"	2	400
U1501HD	Pole Plate		2	225
U0521	Pole Plate		2 & 2 1/2	495



GUY HOOKS

Material

Formed steel hot dip galvanized



Catalog Number	Steel Size	Bolt Hole Dia	45°; Ultimate Str. (lbs)	Weight /100 (lbs)
U25164	2 x 3/16	11/16	10000	113



WIREDHOLDERS

Service Mast, Nylon Alloy

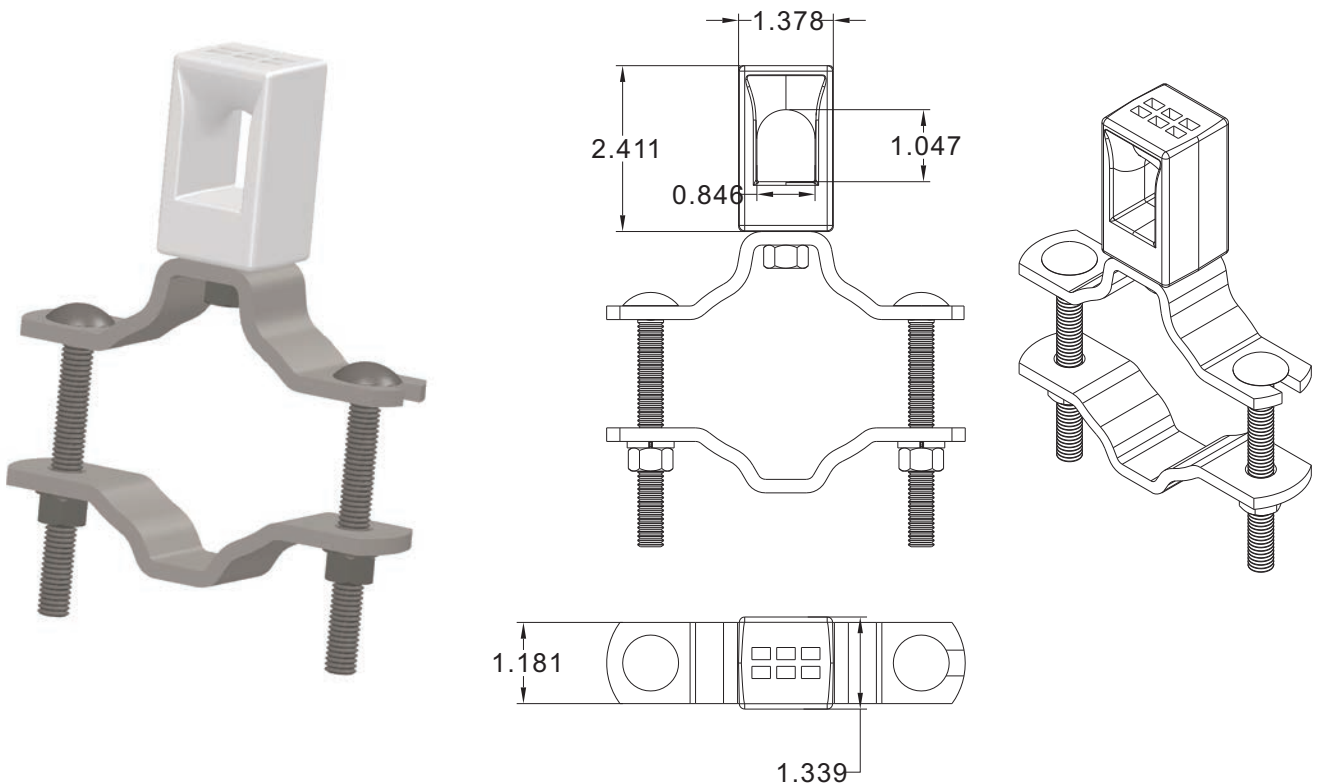
Features

- Manufactured from an engineered blend of nylon alloy reinforced with fibers to provide twice the fracture strength as porcelain.
- Material is UV stabilized for extended service life in ultraviolet exposure
- Open slot for the bracket to be installed without disassembling the bolts
- Accomodates a range of 1 2/3" through 3 1/2" diameter pipe

Material

Wireholder: Nylon alloy

Screw: Steel hot dip galvanized



Catalog Number	Color	Weight /100 (lbs)
U0588Z	Black	120
U0588ZG	Gray	120



WIRE HOLDERS

Nylon Alloy Material Z-Series with Galvanized Screw

Features

- Produced from ultraviolet stabilized nylon alloy compound with reinforced fibers which provide twice the strength as porcelain insulators
- Eliminates breaking and chipping problems associated with porcelain
- Square, flat top which can be used with a hammer to start installation
- The flat top also features an “egg carton” design for indexing and engagement into supplied installing tool for use with a 1/2” drive cordless drill to obtain max. installation efficiency

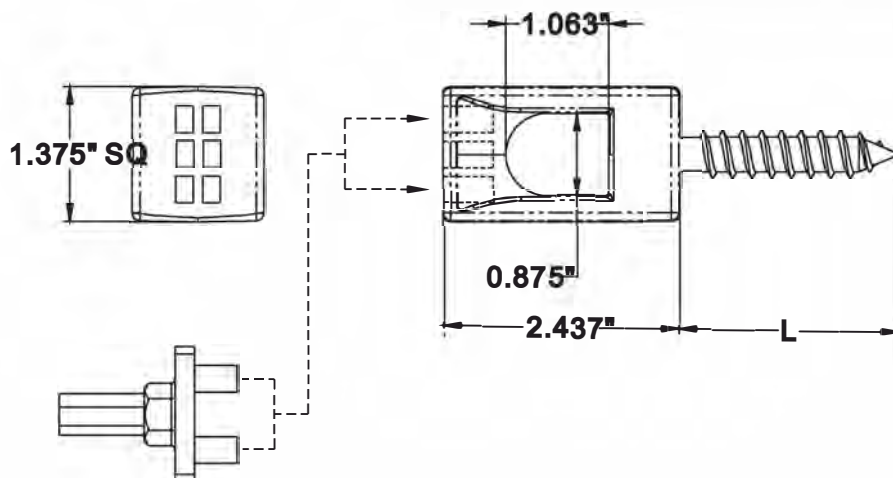
Material

Wireholder: Nylon alloy

Screw: Steel hot dip galvanized per ASTM A153



Catalog Number	Lag Screw Dia (inches)	Color	“L” (inches)	Weight/ 100 (lbs)
U089Z	11/32 (#22)	Black	2 1/4	24
U0893Z	11/32 (#22)	Black	3	26
U0894Z	11/32 (#22)	Black	4	28
U089ZG	11/32 (#22)	Gray	2 1/4	24
U0893ZG	11/32 (#22)	Gray	3	26
U0894ZG	11/32 (#22)	Gray	4	28





PINS CROSSARM CLAMP TYPE

Clamp, Wide Base

The Z-series clamp pins are installed to encircle the crossarm and the broad base distributes the load and eliminates the need for drilled crossarm holes.

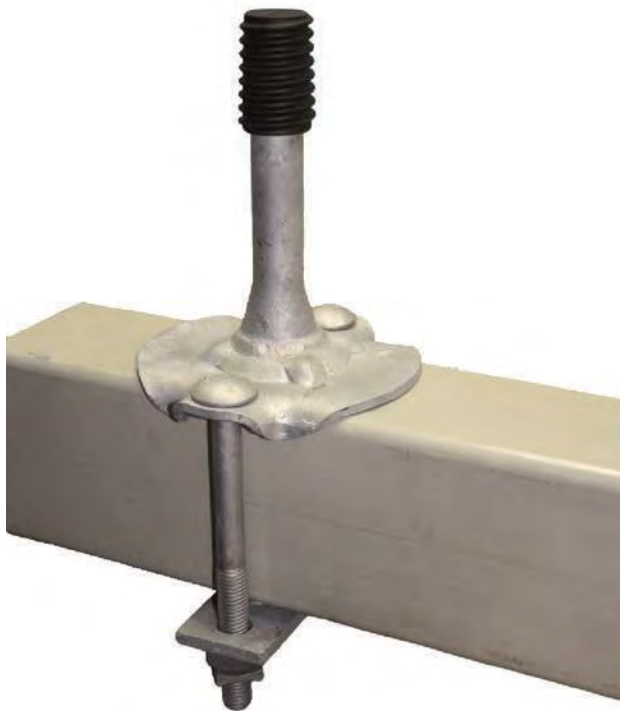
Features

- Nylon insulator threads permanently molded to the pin body
- Manufactured with a forged pin body securely welded to wide base saddle
- Furnished with two 5/8 x 7" carriage bolts and a clamping plate with two raised prosection on one side to resist movement. Clamp plate could be

Material

Pin body: Steel hot dip galvanized per ASTM A153

Threads: Nylon alloy



Catalog Number	Insulator Thread (in)	Crossarm Size (in)	Height Above Arm (in)	Weight/100 (lbs)
U3322Z	1	3 3/4 x 4 3/4	6	452
U3324Z	1 3/8	3 3/4 x 4 3/4	7	553



ARMS, STEEL

Steel Arms

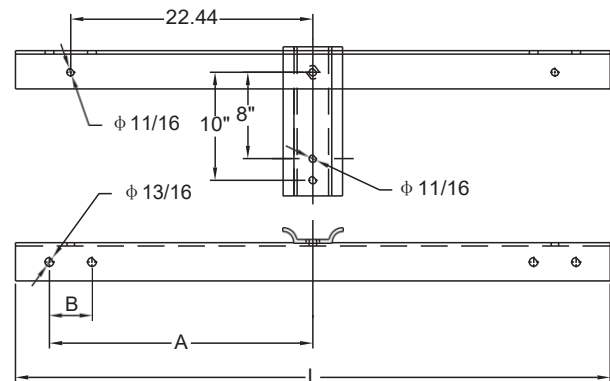
Steel crossarms are produced from structural steel angle or tubing for high strength deadend and tangent applications.

Features

- Multiple bolt holes for a variety of conductor attachment points permit assembly of jumper pins and arrester/equipment mounting brackets
- Provided with a center mounting plate for attachment to pole

Material

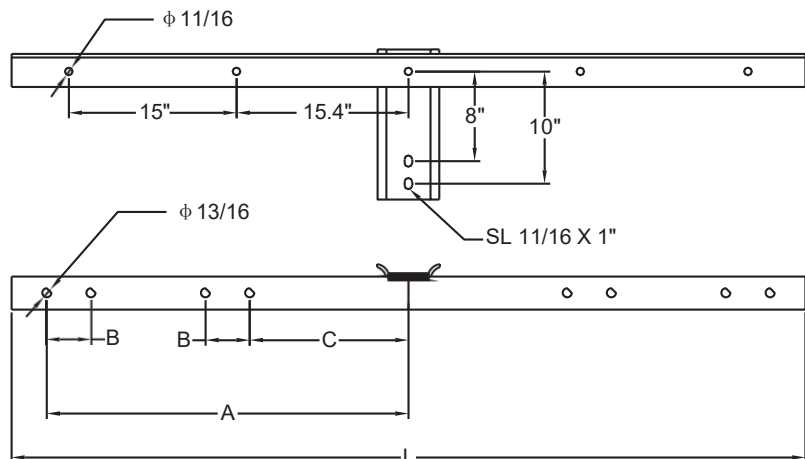
Steel hot dip galvanized



Steel Crossarm (3.5" x 3.5" x 5/16" Angle)					
Catalog Number	L	A	B	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA516-55	55	24.4	4	5000	41

Notes:

- 1) Strength ratings based on balanced load applications



Steel Crossarm (3" x 3" x 5/16" Angle)						
Catalog Number	L	A	B	C	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA516-70	70	32.3	4	14.2	4000	41.5

Notes:

- 1) Strength ratings based on balanced load applications



ARMS, STEEL

Steel Arms

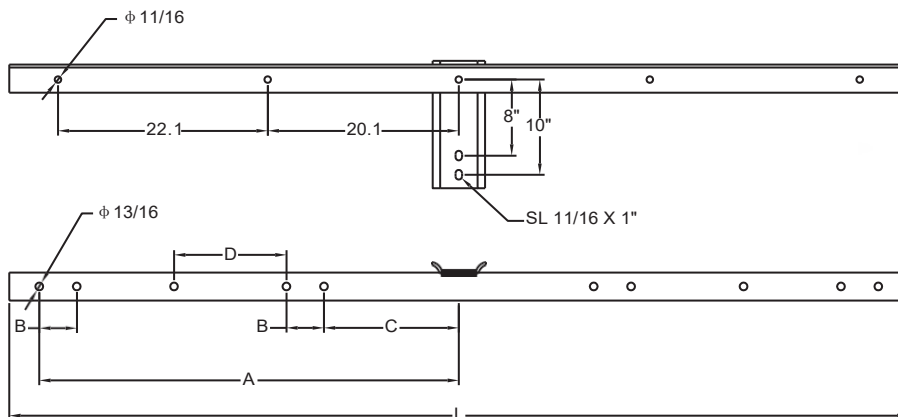
Steel crossarms are produced from structural steel angle or tubing for high strength deadend and tangent applications.

Features

- Multiple bolt holes for a variety of conductor attachment points permit assembly of jumper pins and arrester/equipment mounting brackets
- Provided with a center mounting plate for attachment to pole

Material

Steel hot dip galvanized

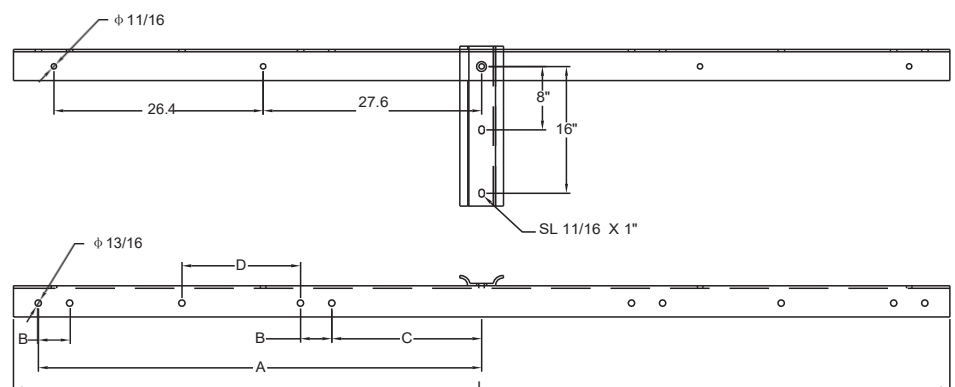


Steel Crossarm (3" x 3" x 5/16" Angle)

Catalog Number	L	A	B	C	D	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA516-94.5	94.5	44.1	4	14.2	11.8	4000	53.2

Notes:

- 1) Strength ratings based on balanced load applications



Steel Crossarm (4" x 4" x 5/16" Angle)

Catalog Number	L	A	B	C	D	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA516-118	118	56	4	19	15	6000	90.8

Notes:

- 1) Strength ratings based on balanced load applications



ARMS, STEEL

Steel Arms

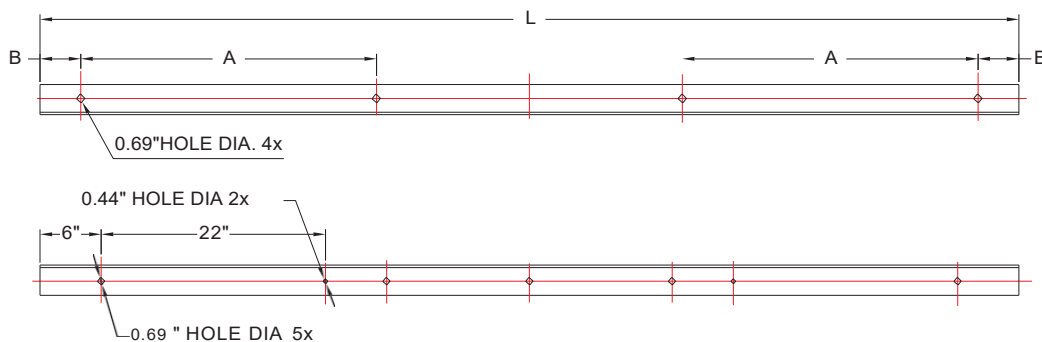
Steel crossarms are produced from structural steel angle or tubing for high strength deadend and tangent applications.

Features

- Multiple bolt holes for a variety of conductor attachment points permit assembly of jumper pins and arrester/equipment mounting brackets
- Provided with a center mounting plate for attachment to pole

Material

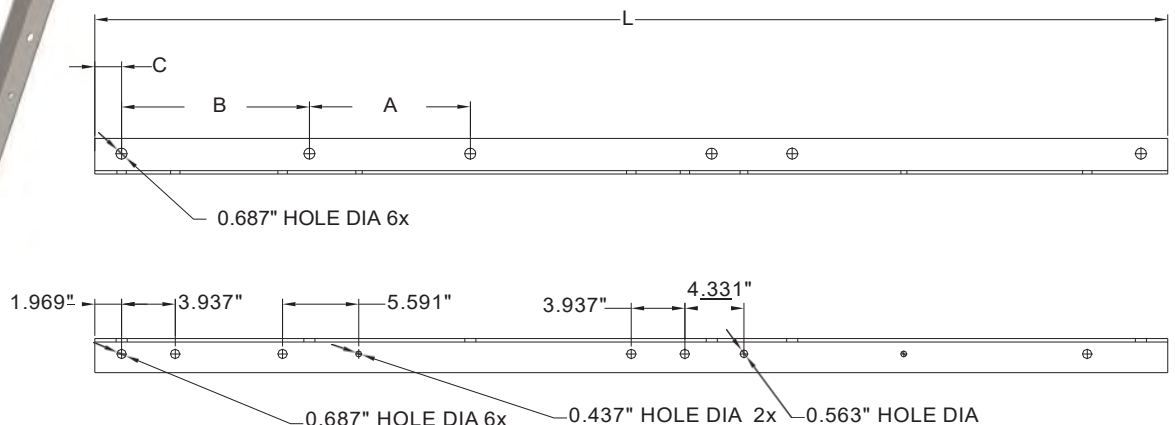
Steel hot dip galvanized



Catalog Number	Steel Angle	L	A	B	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA14-3-96	2.5"x2.5"x1/4"	96	29	4	3000	36.6
SACA14-96	3"x3"x1/4"	96	29	4	3000	28.5

Notes:

- 1) Strength ratings based on balanced load applications



Steel Crossarm (2. 48" x 2. 48" x 1/4" Angle)

Catalog Number	L	A	B	C	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA14-79	79	11.811	13.78	1.969	2500	24.5

Notes:

- 1) Strength ratings based on balanced load applications



ARMS, STEEL

Steel Arms

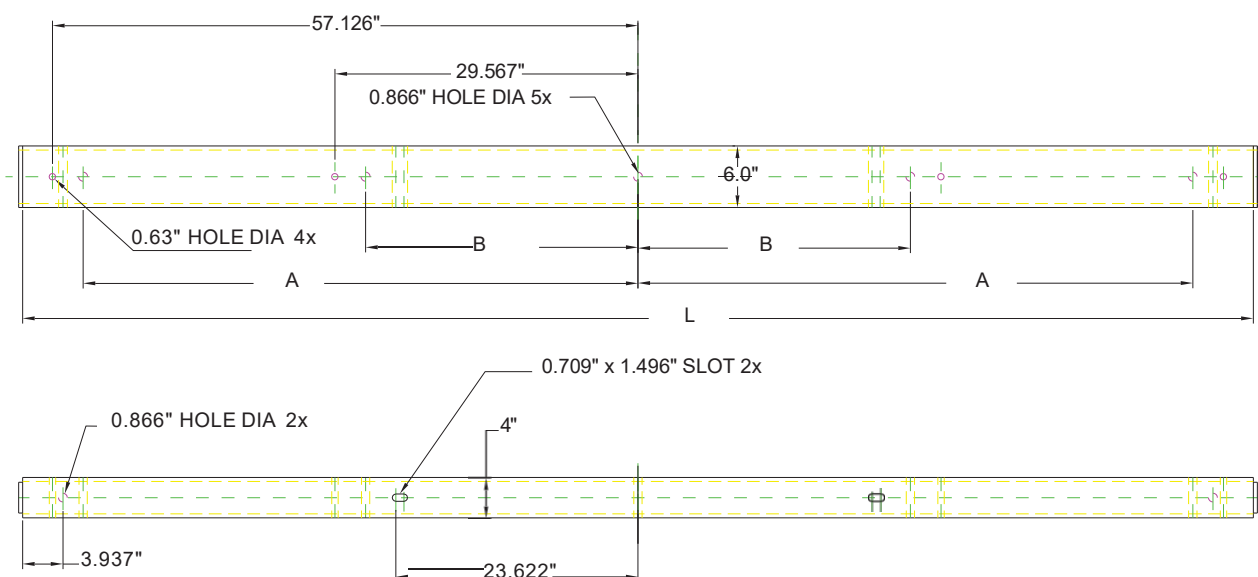
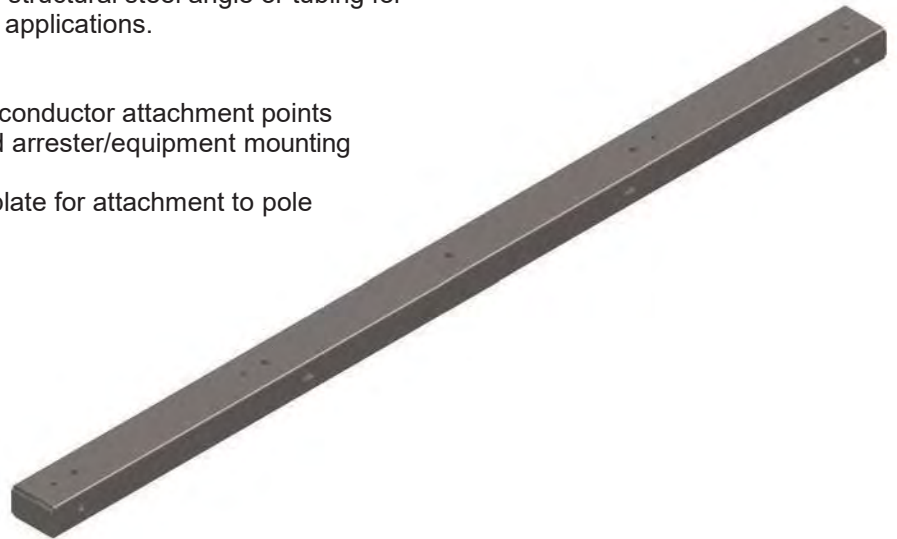
Steel crossarms are produced from structural steel angle or tubing for high strength deadend and tangent applications.

Features

- Multiple bolt holes for a variety of conductor attachment points permit assembly of jumper pins and arrester/equipment mounting brackets
- Provided with a center mounting plate for attachment to pole

Material

Steel hot dip galvanized



Steel Crossarm (4" x 6" x .313" Tube)

Catalog Number	L	A	B	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA46-120	120	54.134	26.575	7000	203

Notes:

- 1) Strength ratings based on balanced load applications



ARMS, STEEL

Steel Arms

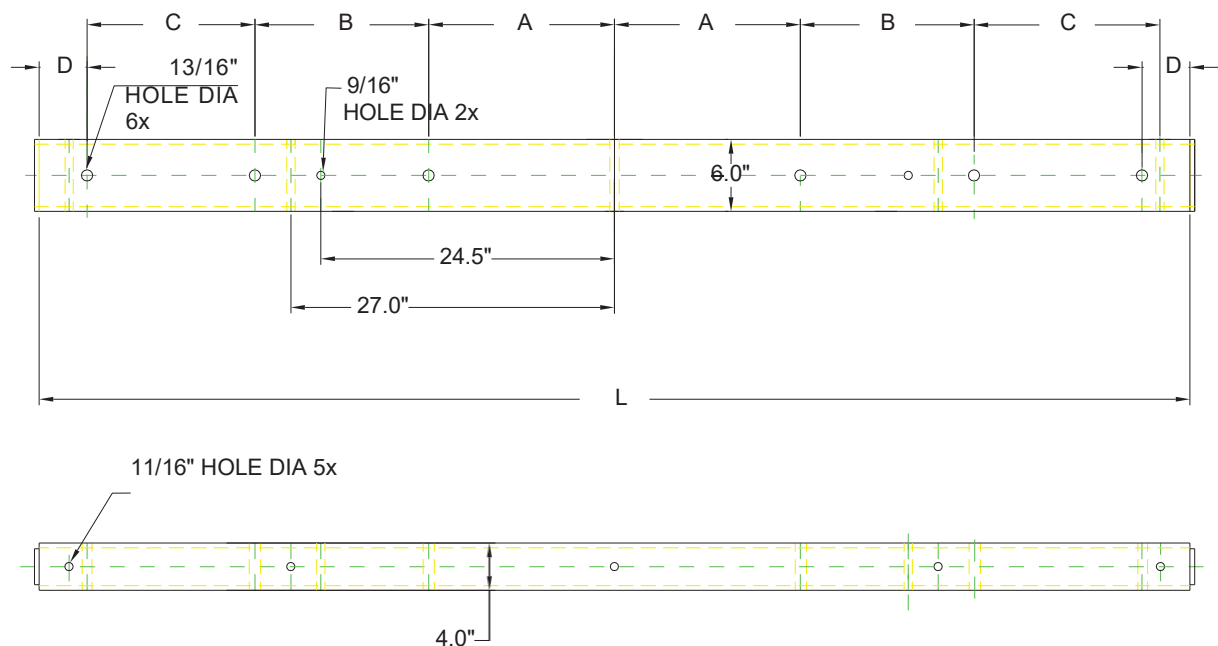
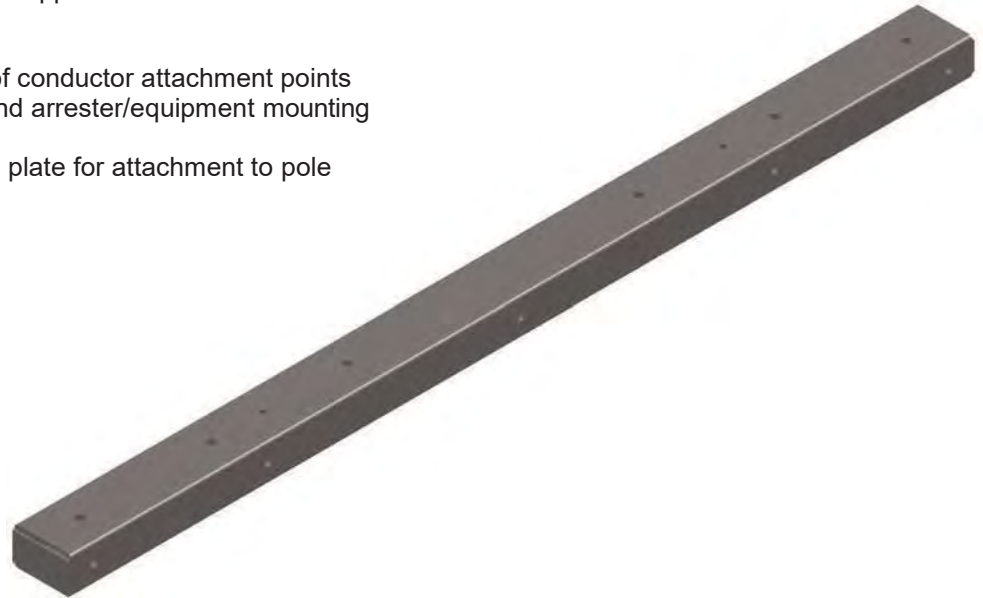
Steel crossarms are produced from structural steel angle or tubing for high strength deadend and tangent applications.

Features

- Multiple bolt holes for a variety of conductor attachment points permit assembly of jumper pins and arrester/equipment mounting brackets
- Provided with a center mounting plate for attachment to pole

Material

Steel hot dip galvanized



Steel Crossarm (4" x 6" x .313" Tube)

Catalog Number	L	A	B	C	D	Ult Strength Rating Per Phase (lbs)	Weight Ea (lbs)
SACA46-96	96	15.5	14.5	14	4	7000	159

Notes:

- 1) Strength ratings based on balanced load applications

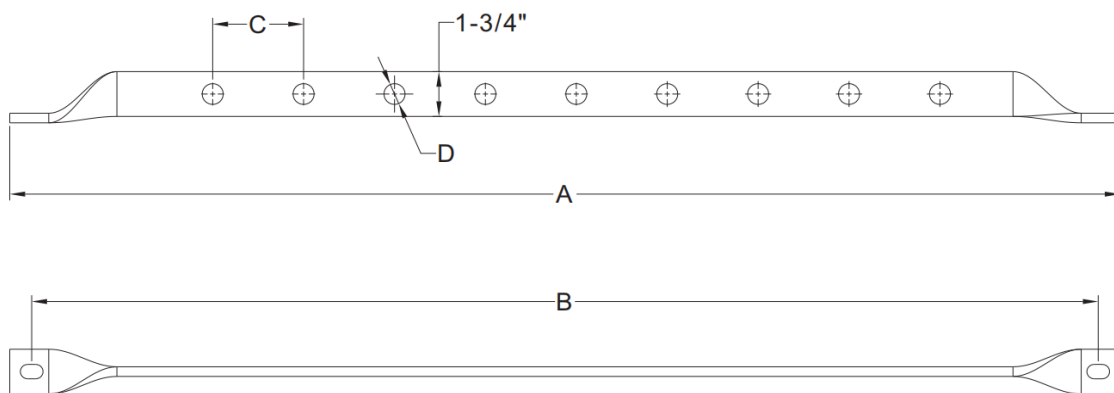


CABLE RACKS

Nob-Loc Racks

Manufactured from 3/8" x 1 3/4" steel.

Can accommodate from one to 9 supports.



Catalog Number	NO.of Support Holes	Dimensions(in.)				Weight 100 Pcs.
		"A"	"B"	"C"	"D"	
U2147	1	14 3/4	13	—	13/16	260 lbs.
U2148	3	28 3/4	27	7	13/16	500 lbs.
U2149	9	42 3/4	41	3 1/2	13/16	740 lbs.
U2150	13	56 3/4	55	3 1/2	13/16	990 lbs.





PINS ANGLE CROSSARM

Angle Crossarm

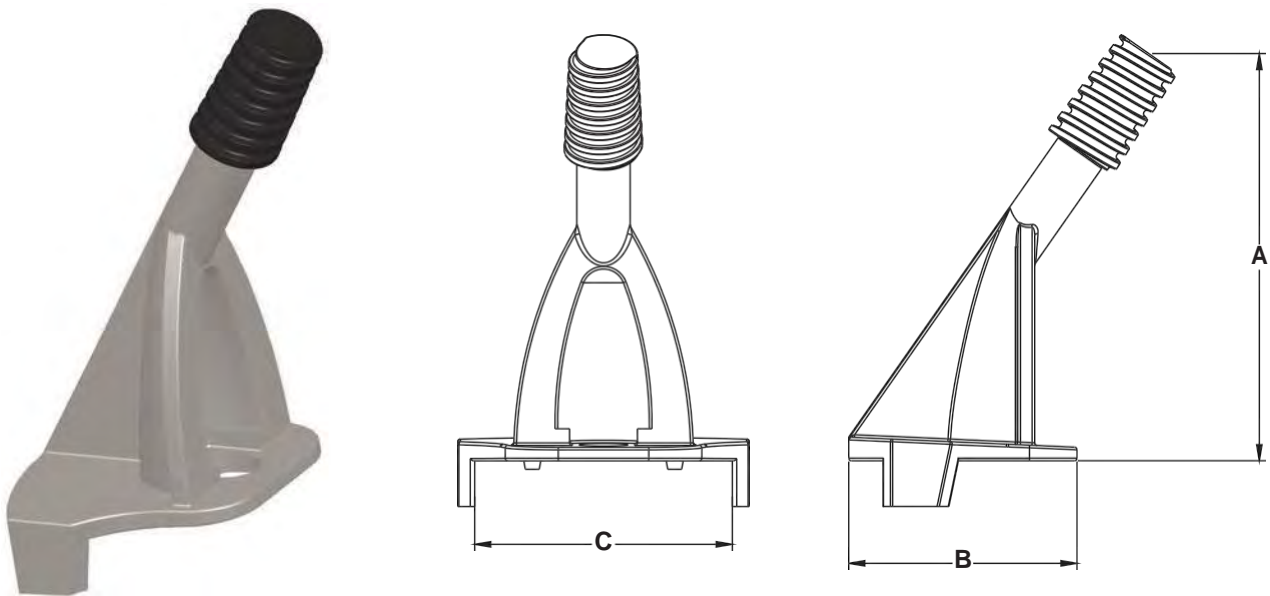
Angle pin brackets can be used for angle construction on crossarms or mounted on the side of poles.

Features

- Mount with a 5/8" diameter machine bolt
- Pin base is flat for mounting to either a pole or crossarm
- Angle crossarm pins have a smooth base on the bottom for mounting on wood or fiberglass arms

Material

Pin Body: Ductile iron hot dip galvanized
Threads: Nylon alloy or lead



Catalog Number	Thread Material	Insulator Thread (in)	A	B	C	Weight/ 100(lbs)
U8779Z	Nylon Alloy	1	6	3.375	3.8	315

Notes:

- 1) Include: 5/8" x 7" machine bolt and nut , lock washer and round washer;
5/8" square nut and round washer.



SPACER, PIPE

Material

Steel hot dip galvanized



Catalog Number	Description	Length, Inches	Pipe, Inches (I.D.)	Weight /100(lbs)
U2031	Spacer	1-1/2	3/4	16

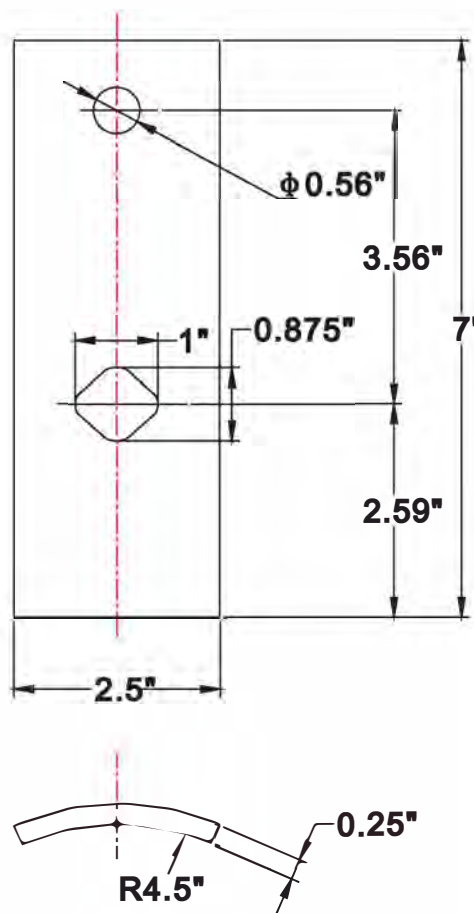


PLATES, LIFT AND LOAD

Used to protect poles on heavy down guying when Thimbleye, Angle-Thimbleye or Oval-Eye bolts are used through the pole. Hot dip galvanized.

Material

Steel hot dip galvanized



Catalog Number	Description	Size Holes, Inches		Plate Size, Inches	Weight /100(lbs)
		Top	Bottom		
U7888	2-Hole Lift	9/16	7/8 x 1	1/4 x 2-1/2 x 7	116



TRANSFORMER MOUNTING

Material

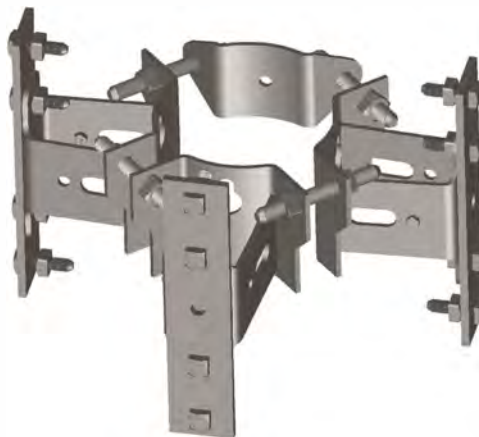
Steel hot dip galvanized per ASTM A153



U115



U215



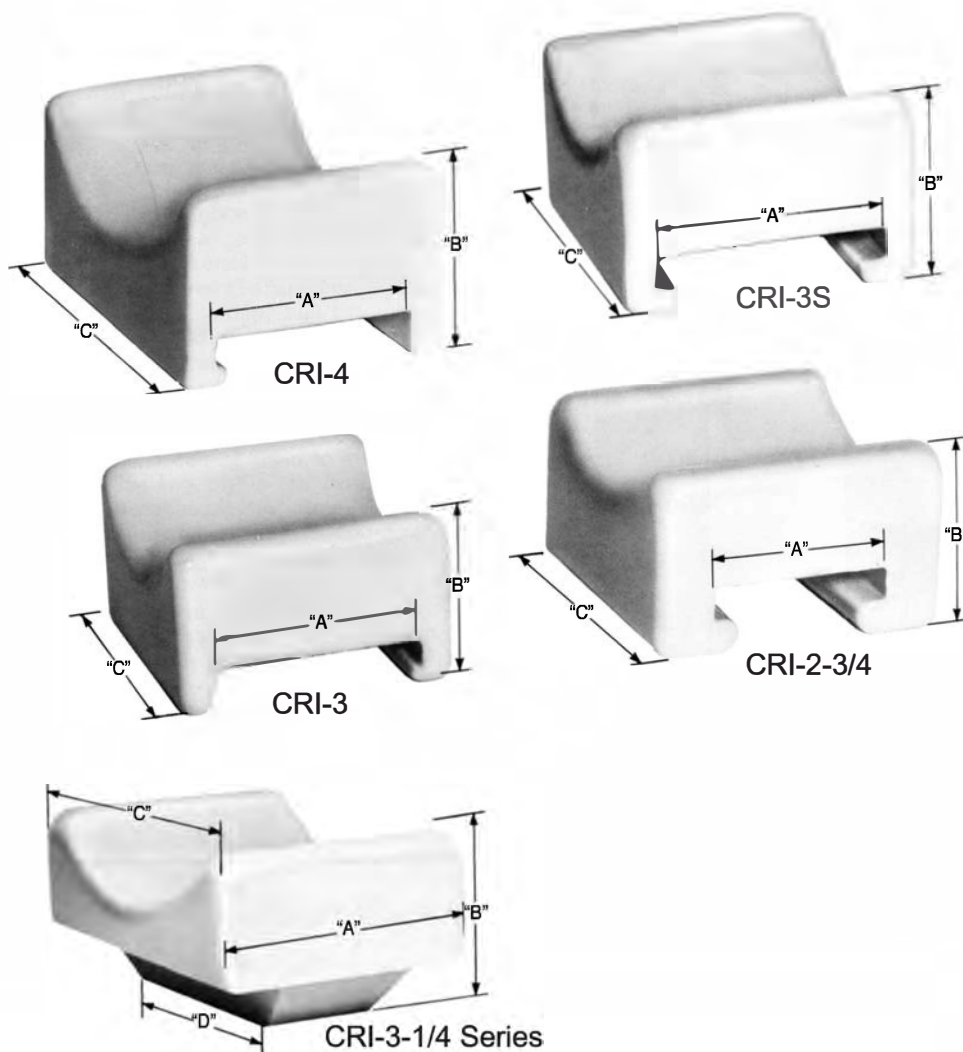
U315

Accessories Description (In Quantity Of Parts)	U115	U215	U315
Crowned Plate	3	2	1
Crowned Plate With Bracket	1	2	3
Guy Clamp with hexagonal bolt 3/8" x 1"	1	2	3
Machine Bolt 5/8"x2" full threaded	4	8	12
Double Arming Bolt 3/4"x 6.1/2" with 02 square Nuts	4	4	4
Flat Plate	1	2	3
Total Weight/(lbs)	27.5	39	50



CABLE SUPPORT INSULATORS

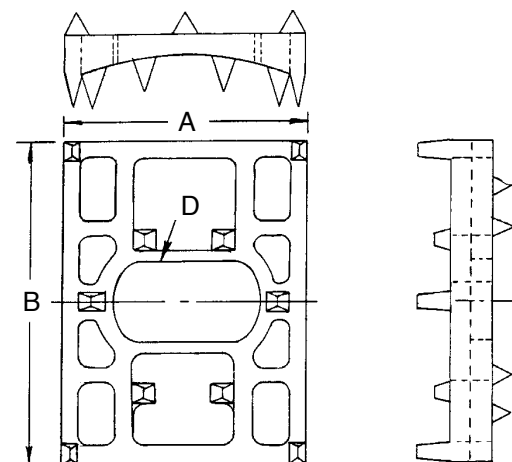
High-grade electrical porcelain insulators with rounded corners and edges prevent cable-sheath damage.



Catalog No.	Dimensions (in.)				Groove Radius	Accommodates Support (Catalog No. Series)	Std. Pkg.	Weight 100 Pcs.
	"A"	"B"	"C"	"D"				
CRI-4	2-1/16	2-1/16	4	-	2-1/16	DU1S, DU3S	50 pcs.	112 lbs.
CRI-3S	2-1/16	1-3/4	3	-	1-7/16	DU3S	50 pcs.	76 lbs.
CRI-3	2-1/16	1-3/4	3	-	1-7/16	DU1S, DU3S	50 pcs.	74 lbs.
CRI-2-3/4	1-5/8	1-11/16	2-3/4	-	1-1/2	DU5S	50 pcs.	78 lbs.
CRI-3-1/4	2-1/2	1-5/8	3-1/4	1-3/8	1-3/4	DU3S, DU9S	50 pcs.	70 lbs.



GRID GAINS



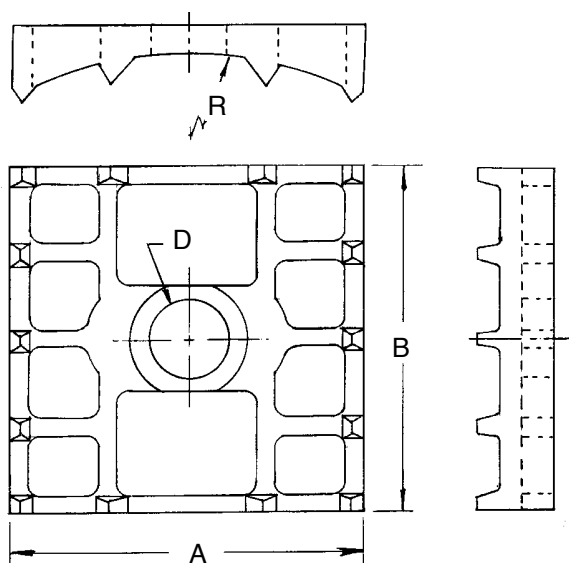
Crossarm Grid Gain

Curved face with spurs prevents need of cutting gain into pole. Slotted hole for easy alignment.

Catalog No.	Dimensions In Inches			Pole Dia. Range	Crossarm Range	Approx. Ship Wt. Lbs. Per 100 Pcs.
	A	B	Max. Bolt Dia. "D"			
GG31	3	4	0.88	6" - 10"	3 1/2" - 5 1/2"	80
GG45	4	5 3/8	13/16	6" - 11"	5" - 7"	180

Ductile iron per ASTM A-536

Hot dipped galvanized per ASTM A-153



Flat Back Crossarm Gain

Curved face with spurs prevents need of cutting gain into pole. Large surface area reduces crossarm shift.

Catalog No.	Dimensions In Inches			Pole Dia. Range "R"	Approx. Ship Wt. Lbs. Per 100 Pcs.
	A	B	Max. Bolt Dia. "D"		
GG44	4	4	7/8	6" - 11"	120
GG459	4.5	9	0.97	/	301
GG47	4.5	4	7/8	/	135

Ductile iron per ASTM A-536

Hot dipped galvanized per ASTM A-153